

## choice

JULY 2010 • WWW.CHOICE.COM.AU

## Local heroes

Why Aussie extra virgin olive oils reign supreme

### PLUS

Food packaging: how much is too much?

How sugar-free products can still rot your teeth

Should you buy that mattress brand again?

Finding truly independent financial advice



### Optical illusion

Our shadow shop reveals you should be wary of cheap advertised offers on specs



### Floored industry

Can you be sure you're choosing a sustainable timber floor? We explain how

### Lab tests

- Breadmakers
- Family laptops
- Basic & music mobile phones
- Pocket camcorders
- Set-top boxes with USB connection
- Car tyres



119 PRODUCTS  
RATED!

Get slim, stay slim: 6 vital dietary strategies proven to work

## COMMENT

# From local to global

As part of our new Checkout CHOICE campaign, we call for a fair and competitive supermarket sector – and we want you to join us



**T**hose of you who read my editorials know how committed I am to involving members in what we do here at CHOICE. Our lab tours and new Founders' Club are designed to do just that.

A few days ago, I welcomed a tour of 30 people around our labs and we had lunch afterwards – a fabulous way for me to get a better idea of what you expect from CHOICE, and for you to witness first-hand the robustness of our testing. And a couple of weeks ago, as part of key research on supermarket premium versus home brand foods, 60 members visited to take part in a taste test – the largest member taste test we've ever conducted.

CHOICE members are invariably passionate and vocal, and this event was no exception. Eating their way through premium and home brand cheese, baked beans, canned fruit and ham from Aldi, Woolworths and Coles, our tasters provided valuable insights to inform our research, the results of which you can read about in upcoming issues of CHOICE.

We know from your response to the government's axing of the proposed Grocery CHOICE website last year that you have strong views about supermarkets. Whether it's lower prices, better quality or more choice, it's clear you want a better deal. So if you haven't yet signed up to our Checkout CHOICE campaign, please do so. We're calling for a fair and competitive supermarket sector and

the establishment of an industry ombudsman to tackle concerns raised by consumers, farmers, suppliers and independent retailers. Visit [www.checkoutchoice.com.au](http://www.checkoutchoice.com.au) to take action.

It's often only when we compare our challenges with those faced by others that we realise the strength of our own position. Whatever our consumer concerns are in Australia, CHOICE is able to address them against the backdrop of a strong and stable civil society. This is not the case for some of our colleagues in the world consumer movement, as was highlighted during the recent riots in Bangkok.

The building of the Thai consumer group, Foundation for Consumers (FFC), was seriously damaged during the protests, leaving the organisation homeless and undermining its excellent work for consumers, which includes publishing the *SmartBuyer* magazine and giving legal support to 10,000 Thai consumers.

CHOICE has joined sister organisations around the world to draw up an emergency relief plan for FFC. We've donated US\$5000 and offered marketing support to help FFC recruit more members, and we're also providing legal advice to help them fight for a fair insurance claim. As a CHOICE member, you are also a de facto member of this worldwide consumer movement. Because of your support, we're able to ensure that ailing consumer organisations can continue to provide vital services.

As always, if you have any comments or ideas you'd like to share, please call me on the number below.

**Nick Stace, CEO**  
Phone 1800 266 786

## CHOICE. Make the right one.

CHOICE gives you the power to choose the very best goods and services, and avoid the worst. We pay full price for the products we test, so we remain 100% independent. We don't take advertising and we don't accept freebies from industry.

We're not a government body and our consumer publishing and advocacy is almost entirely funded by subscriptions to our magazines, to [www.choice.com.au](http://www.choice.com.au) and from other services we supply for the benefit of consumers.

CHOICE product ratings are based on lab tests, expert assessments and consumer surveys. CHOICE staff also research a wide range of consumer services. They reveal the truth behind the facts and figures, and investigate the quality and the claims.

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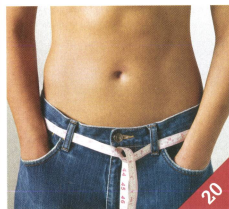
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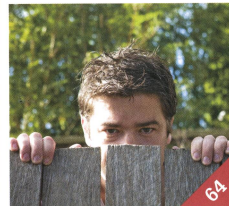
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The ACCC advises parents to be cautious when using infant slings for babies younger than four months



### SLING-SAFE BABIES

The Australian Competition and Consumer Commission (ACCC) is investigating the need for a safety code for baby slings, particularly for babies younger than four months of age. The move comes after more than a million Infantino SlingRider products were recalled in the US after they were reportedly linked to three infant deaths.

Unlike a baby carrier or pouch, which holds your baby in a vertical position, a sling places the infant in the "peapod" position, meaning the child is carried wrapped around or across your body in a C-shape. The US Consumer Product Safety Commission (CPSC) and CHOICE's US sister organisation, Consumers Union, have raised concerns about the safety of baby slings – in particular, that they can become a suffocation hazard and injuries may occur from the baby falling out of the sling. The CPSC is investigating at least 14 deaths associated with baby slings, including three in 2009. There have also been at least 22 reports of serious injuries occurring when a child fell out.

The ACCC is advising parents and caregivers to be cautious when using infant slings for babies younger than four months. Surprisingly, despite the popularity of baby slings in Australia, currently there is no national safety standard for this product. KATE BROWNE

### SUSTAINABILITY

## Power to the people

Consumers strike a blow for sustainable practices.

**M**ore than 23,000 Australians recently demanded that global food and beverage giant, Nestlé, stop using palm oil linked to rainforest destruction, following a viral campaign on Facebook and Twitter.

After a two-month offensive led by Greenpeace, the power of social media triumphed, with Nestlé announcing it would exclude palm oil supplies linked to deforestation by 2015.

In March, Greenpeace launched a parody video that became an instant hit on YouTube, linking Nestlé's KitKat chocolate bar to deforestation in Indonesian rainforests and the

destruction of orang-utan habitats.

Consumers worldwide who saw the video posted their concerns on Nestlé's fan page, which led to this victory.

Palm oil is hidden in our food and is both unsustainable and unhealthy. Next month, CHOICE will report on this important issue. CECILIA LEE



### PRODUCT RECALLS

## Tech-targeted audience

The consumer watchdog reaches out to a wider audience via social media.

**T**he Australian Competition and Consumer Commission (ACCC) is embracing new ways to increase awareness of product recalls for consumers and recall response rates, following a major review of the limited effectiveness of newspaper ads.

The regulator will now send "tweets" on its newly established Twitter account, @productsafetyAU, blog on a range of sites, and directly email industry associations and stakeholders (among others). It has also revised its product safety and recalls website, [www.recalls.gov.au](http://www.recalls.gov.au), so consumers and businesses can sign up for electronic recall alerts about the types of products that most interest them (such as children's products) as well as search for specific products or manufacturers.

The ACCC is encouraging suppliers to place tracking labels on their products so they can be easily traced as they move through the supply chain and into consumers' homes. Suppliers will also be encouraged to use online warranty cards and registration systems, as well as make greater use of loyalty card data to identify consumers who buy products that are later recalled.

In future, the ACCC will not accept that a recall is finalised until the cause of the problem is identified and measures are put in place to ensure it does not occur again. CECILIA LEE

## FOOD

## Import glut of core foods

Why are more Aussies choosing imported over home-grown food?



**W**e may be spoilt for choice when it comes to quality local produce in our supermarkets and specialty stores, but Australians are increasingly selecting imports over home-grown fresh and processed foods, according to business information analysts IBISWorld.

It's estimated that in 2010, 30% of our total seafood consumption will be made up of imports (close to \$1.05 billion in value) and 20.4% of our fruit and vegetables will be from overseas (valued at more than \$1.7 billion).

Imported wine and meat are also expected to grow in popularity.

According to IBISWorld's general manager (Australia), Robert Bryant, a number of factors are driving this trend, including "a decrease in local production and an increase in consumer demand for greater variety, as well as the employment of clever marketing by international exporters."

Another factor may be the lack of clarity regarding country-of-origin information on processed food. "It can be extremely difficult

for consumers to judge the 'Australianness' of their food when faced with an array of claims on food labels – such as 'Made in Australia from local and imported ingredients', 'Australian Owned', 'Product of Australia' and 'Manufactured in Australia'," says Clare Hughes, CHOICE's Senior Food Policy Officer. "Country-of-origin labelling requirements for food should be reviewed to provide consumers with clearer information on the origin of foods and key ingredients."

In our submission to the Food Labelling Law and Policy Review, CHOICE recommends that all foods, including packaged goods and fresh produce, be required to identify their country of origin. We also want the Food Standards Code to be amended to prohibit unqualified "made in" claims and require manufacturers to disclose the origin of significant or characterising ingredients, or highlight those ingredients that have been imported. **RACHEL CLEMONS**



**CHOICE  
ONLINE**

Go to [www.choice.com.au/babycarriers](http://www.choice.com.au/babycarriers) for more information on baby carriers.

## IN BRIEF

### ANTIOXIDANT MYTHS BUSTED

Drinking red wine and coffee, eating chocolates and consuming vitamins C and E will not prevent or treat cardiovascular disease (CVD), according to the National Heart Foundation (NHF). After reviewing 100 studies, the NHF confirmed eating at least two serves of fruit and five serves of vegetables a day, as well as drinking black or green tea, will help reduce CVD risk and maintain cardiovascular health.

For more information, go to [www.heartfoundation.org.au](http://www.heartfoundation.org.au).

### CHOICE LABS GOING PLACES

CHOICE's energy and water efficiency test results will now be used in partnerships with Energy Australia and the Australian Conservation Foundation (ACF). Energy efficiency of whitegoods will be published in brochures distributed by Energy Australia, while the green value or sustainability of whitegoods and other major appliances will appear in a series of reports in the ACF's *Habitat* magazine.

### NOT UNLIMITED

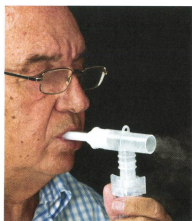
The ACCC has taken Optus to court, claiming certain TV, radio and print advertisements run by the telco giant that advertise "unlimited" calls on its \$70 pre-paid Turbo Max plan, "unlimited" broadband and "unlimited" calls on its broadband and home telephone plans are misleading, because the offers are subject to a number of limitations and restrictions. The ACCC is seeking admissions that Optus contravened the *Trade Practices Act*, as well as injunctions and costs.

**CHOICE continues to expose nutritional inadequacies in processed foods; most brands of multigrain bread contain too much salt, while many breakfast cereals contain too little fibre but too much sugar**

## HEALTH

### Asthma at any age

A recent study has shown asthma does not discriminate according to age.



**T**he number of people aged over 45 dying from asthma attacks has increased in the past five years, according to a recent report released by the Australian Institute of Health and Welfare. Research conducted by the institute found that in 2006, 402 people had died from asthma – up from 318 the year before.

The report, which focused on asthma among older people, revealed 92% of deaths due to asthma occurred in those aged

45 years and older. Its authors argue these results challenge the popular but incorrect perception that asthma is more common in young people, and that people don't normally develop asthma later in life.

The National Asthma Council Australia says older adults may consider breathlessness to be a frustrating but natural consequence of ageing, without realising that respiratory disease may be the cause. **KATE BROWNE**

## MONEY

### Profits without penalty

NAB shows it can improve its consumer products and still generate enormous profits.

**F**inancial markets may have been disappointed by National Australia Bank's recent 22% drop in personal banking cash earnings, but for customers, a new emphasis on fairer banking appears to be yielding results. A survey by Roy Morgan Research, based on a nationally representative sample of more than 50,000 consumers, found that in the 12 months to April 2010, the bank's customer satisfaction level rose by 4.1%. Only Bankwest had a bigger improvement, with 5.7%.

NAB claims to have had a 42% reduction in customer complaints and a fivefold increase in new transaction accounts since making improvements last year. In April, the bank won an

inaugural CHOICE Award for its Classic Banking transaction account, which has comparatively low fees (see *CHOICE*, April 2010, page 73). And following a sustained campaign by CHOICE and the Consumer Action Law Centre, as well as a backlash from its customers, NAB went further than all its competitors by abolishing the penalties for occurrences such as direct debit dishonours and overdrawn accounts. The bank's chief executive, Cameron Clyne, has since labelled these fees "unsustainable and consumer-unfriendly".

However, according to the Roy Morgan report, NAB still has significant ground to make up. The survey found customer satisfaction

level is 71%, the lowest of the four major banks and far below ING (86.6%), Bendigo Bank (84.1%), building societies (88.2%) and credit unions (86.3%). And like many of its competitors, NAB faces the uncertainty of a potential class action run by law firm Maurice Blackburn, following years of excessive and potentially unlawful penalties that yielded billions of dollars for Australian financial institutions.

**ALAN DOOLEY**

## NUMBER CRUNCH

**\$2.2 BILLION**

The profit made by the National Australia Bank in the past six months.





## SLEEP NUMBER

People who regularly sleep fewer than six hours or more than nine hours a day are more likely to die prematurely than those who sleep between six and eight hours, according to a study carried out by the University of Warwick in Coventry, UK, and Federico II University Medical School in Naples, Italy.

The universities researched 16 prospective studies from the UK, US, European and East Asian countries, including more than 1.3 million participants who were followed for between four and 25 years. Sleep duration was assessed by questionnaire, and the outcomes – with more than 100,000 deaths recorded – were obtained through death certification.

How well you sleep can largely depend on how comfortable your mattress is. Turn to page 31 to find out how to buy your perfect mattress. **TANYA FONG**

## TELECOMMUNICATIONS

### Hold the line

Telstra announces new initiatives following a particularly galling example of poor customer service.

**T**elstra customers living in metropolitan and some regional areas can now book to have their fixed-line or BigPod cable service installed or repaired on weekends.

In addition, those who have unresolved problems can contact Telstra on 132 200 from Monday to Friday and say "complaint" to an automated service, to be transferred directly to a specially trained consultant.

The telco giant, which receives the most number of consumer complaints at the Telecommunications Industry Ombudsman's office for various landline, internet and mobile phone issues, is also trialling a call-back system for consumers who experience extended telephone queues.

While these changes are positive for consumers, CHOICE believes Telstra can further improve on the time it takes to respond to and resolve consumer complaints. Telstra customer Rebecca

Gardiner, who was wrongly charged with a monthly broadband bill of close to \$8500, had to wait three months for her issue to be resolved, with only intermittent internet access in the meantime. "I called many times and personally visited several Telstra shops to ask for help," she told CHOICE. "Everyone said they would help, but never told me when. The last Telstra staff member I spoke with even promised he would sort things out and that I wouldn't be cut off."

When Rebecca was left with no word, no action and no internet access, she contacted the media, including CHOICE. Only then did Telstra waive her bill and apologise for the error and for "insufficient follow-up" of her subsequent complaints.

Go to [www.choice.com.au](http://www.choice.com.au) to find out more about smart phone data usage and broadband billing to protect yourself against bill shock. **TANYA FONG**

## FOOD

### Nice try

A government initiative designed to improve the quality of our food favours manufacturers over consumers.

**A**s part of the 2010-11 Commonwealth Budget, the federal government has committed to spending \$900,000 over three years to fund the Food and Health Dialogue. Initiated in October 2009, the Dialogue is aimed at providing a framework for government, industry and public health groups to improve the nutritional quality of our food.

And there's plenty of scope for improvement; CHOICE reports repeatedly highlight nutritional inadequacies in processed foods. Most brands of multigrain bread, for example, contain more salt than is strictly necessary for good flavour and texture; many of the most popular breakfast cereals contain too little fibre but far too much sugar and salt; while pizzas and other takeaway foods are often loaded with saturated fat.

So far, the Dialogue has persuaded some manufacturers to phase in a modest reduction in levels of salt in bread and breakfast cereals. But participation is voluntary, and a report recently released by the George Institute for International Health found 70% of processed meats, cheeses and sauces sold in Australia contain unacceptably high levels of salt.

While a step in the right direction, the Food and Health Dialogue is heavily weighted on the side of industry. It includes representatives from the Australian Food and Grocery Council and Woolworths, yet consumers have no seat at the table.

Meanwhile, the food industry strenuously opposes measures that independent research shows will genuinely help consumers to make healthier choices, such as restrictions on advertising junk food to children, and the introduction of "traffic lights" on food labels that would clearly indicate excessive levels of saturated fat, sugar and/or salt. **DAVID OAKENFULL**





## COMING

### CFL bulbs

With incandescent light bulbs now mostly phased out, compact fluorescent (CFL) bulbs are your main option on the supermarket shelves. The prices of CFL bulbs have dropped substantially since CHOICE last tested them, but has their performance improved? We've put them through more than 2000 hours of rig testing to find out.

### Washing machines

In our latest appliance reliability survey (see Built to Last, CHOICE May 2010, page 14), CHOICE members told us that Miele, AEG and Bosch are the most reliable brands of washing machine. Our next update puts nine new machines on test, including a Miele in the 6kg-7kg category. Find out how it performs overall – can the most reliable brands also be the most efficient and effective cleaners?

### Lawn trimmers

Petrol, electric or cordless battery powered? Straight shaft or curved shaft? With such a range of lawn trimmers available on the market, how can you be sure you're buying the safest, most powerful and most comfortable lawn trimmer for you? We put 19 to the test, ranging from \$50 up to \$429, to find out if price reflects quality.



## AUTOMATIC TEA MAKER & KETTLE

### Quality to a tea

Can this automatic kettle really brew a perfect cuppa?

If you enjoy a good cup of tea, you'll know loose tea offers superior quality to tea bags. According to Breville, manufacturer of this automatic tea-maker and kettle, "when teas are steeped for the right time and at the right temperature, it brings out their optimum flavour and aroma". With six tea-type (green, herbal, black, oolong, white and custom) and four strength settings (strong, medium, mild and custom), you're sure to find your perfect brew with this kettle.

The body of the unit is mostly glass. Its stainless steel base has an LCD display screen that allows you to keep track of the process, and a series of button controls that are straightforward to read and use.

As a rule of thumb, you should use one scoop of tea leaves per cup (approximately 250mL). The tea type you select will determine the brew temperature, while the tea strength determines the brew time. An immersed temperature sensor detects when the brew temperature is reached, at which point the tea basket automatically lowers into the water. Once the basket hits the bottom of the jug brewing begins, with its process tracked on the LCD screen. At the end of the brew time the basket automatically raises and the tea is ready to be poured into your cup.

The Breville can also be used as an ordinary kettle, but compared with other kettles is only OK for boiling time, taking more than three minutes to boil one litre of water. However, the whole tea-making process is complete in about five minutes, with a relatively large amount of tea prepared and ready to pour. It also features a "keep warm" function, whereby the brewed tea or heated water can stay warm for up to one

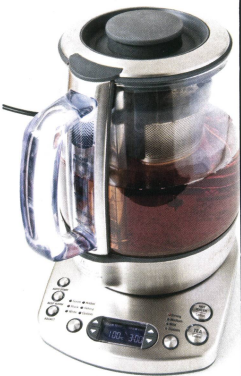
hour. However, during this time the tea could continue to develop flavour and may end up a bit stronger than you'd like.

Small particles of tea leaves can make their way through the filter of the tea basket, and even though there is an additional scale filter at the spout of the jug, if the particles are small enough they can also make their way through this secondary filter and into your cup.

The appliance needs to be cleaned after each use, but once the lid and tea basket are removed there's a large opening into the jug that you can easily fit your hand into for cleaning.

### CHOICE VERDICT

At \$300 this is a fairly expensive benchtop appliance, but it's worth considering if you're always making tea with loose leaves instead of tea bags, especially for a large number of people. It's perfect for a family of tea-lovers or in an office setting. **REBECCA GATTO**



**BREVILLE PROFESSIONAL 800  
COLLECTION AUTOMATIC TEA  
MAKER & KETTLE BTM800**

Price \$300

Contact [www.breville.com.au](http://www.breville.com.au)



## LEGACY MUSIC CONVERSION SYSTEM

## Can't beat the original

This system can convert your old vinyl records to MP3 files, but you're better off sticking with your old turntable.

**T**his device from Base claims to burn your old 33/45 rpm vinyl records to MP3 files, then copy those files to USB or SD cards, all at the press of a button. While it lives up to this claim, the sound produced in the files is a long way off hi-fi quality.

The system also has its own turntable, a built-in AM/FM radio and two small speakers

that deliver a harsh, tinny sound. The sound is OK when connected to a separate system via its line-out, but still nothing like CD quality. It can only convert to MP3 files at bit rates of 32kbps-256kbps; the higher the rate, the less information is dropped from the original sound. There are no controls for frequency manipulation when recording, though there is a bass boost switch that has a marginal effect when playing back music.

The manual refers to functions that didn't match the functions of the model we purchased. The turntable is only supposed to start rotating when the tone arm is lifted, but we found it turning as soon as the function selector was in the "phono" position.



The light, plastic tone arm has to be lifted and placed on the record manually, which can lead to the needle bouncing across the record. Tracks are not separated automatically when recording – you need to press a "separate track" button on the remote control to split them, otherwise you'll end up with the whole record in one big MP3 file. Once recorded, however, it's quite easy to navigate the digital files using the front panel display and controls.

**BASE MUSIC SYSTEM WITH  
DIRECT ENCODING TT-186WWEA**

Price \$89  
Contact Target stores



## CHOICE VERDICT

This product may be OK if you want a cheap and easy way to copy your old vinyl records to MP3 format. But be warned: you won't get quality at this price. **CHRIS RUGGLES**

## EBOOK READER

## Cheap and cheerful

If you want a simple eBook reader rather than a multimedia tablet computer, this could be for you.

**T**he Kobo eReader wasn't released in time for our recent test of eBook readers (see *CHOICE*, June 2010, page 38). However, because of its comparatively low price and ability to download book titles from the Borders online bookstore ([www.borders.com.au](http://www.borders.com.au)), we wanted to see whether it presents a reasonable alternative to a traditional paper-based book.

Unlike the Apple iPad, this eReader is not designed to compete with a laptop or netbook computer or be a multimedia reading device – you'll only use it to read eBooks.

It's light (220g) yet solid, with a non-slip quilted pattern on the back, making it comfortable to hold in one hand. The package comes with a quick-start sheet and a USB cable to connect to a PC for charging and downloading books online.

The eReader allows you to select a book from the library (100 classic book titles are pre-installed) by moving the five-way

directional pad up and down or left and right. The centre button allows you to select a book or bring up the main menu. Four buttons down the left side of the unit provide access to various settings, such as changing the font size, and type and display options.

The bookmark functionality is simple and effective, returning to the last page read when you turn on the eReader. There is no keyboard for performing word searches or making notes, and the screen refresh delay when turning a page can initially be annoying – but you should

get used to both these issues after a day or so.

The link between the eReader and Borders bookstore (which claims to have more than two million titles), using a USB connection to a PC with internet access, is simple and effective, and it only takes a few minutes to set up a user name and account for purchasing and downloading books.

Adobe Acrobat files (PDFs) are supported on the eReader, as well as EPUB, which is rapidly becoming the standard file format for electronic books. Books can be stored either on the internal memory, which holds up to 1000 titles, or on a removable SD memory card (purchased separately) that gives you up to 4GB of additional storage, which should allow you to store a few thousand titles.

## CHOICE VERDICT

The Kobo eReader is competitively priced compared with most eBook readers currently available in Australia. The fact that it's part of an efficient online bookstore with locally available content makes it all the more compelling. **DENIS GALLAGHER**



## KOBO EREADER

Price \$199  
Contact [www.borders.com.au/ereader](http://www.borders.com.au/ereader)



# YOUR SAY

Your experiences help our research and often let other readers know about scams and rip-offs. Positive responses you've had to a complaint you took to a manufacturer, retailer, importer or tradesperson interest us too, so please email [ausconsumer@choice.com.au](mailto:ausconsumer@choice.com.au) or mail to Your Say, CHOICE, 57 Carrington Road, Marrickville, NSW 2204.

## Rope with no grunt

About a year ago, a neighbour purchased several metres of "Grunt" rope from Bunnings. It was used by his young sons for occasional climbing on our large oak tree.

Recently, the rope broke while one of the boys was using it. Fortunately, he was only a couple of metres off the ground and nobody was hurt. Inspecting the rope, I discovered that the centre filament comprises synthetic, flimsy, tissue-like material.

I feel consumers should be warned about these kinds of rope being sold.

**Leo Riters, Pascoe Vale, Vic**

**CHOICE SAYS** The rope labelled "Grunt" – and another we found being promoted as "suitable for outdoor recreational use" – could be confused with specialist climbing rope owing to their similar appearance. The loosely woven Grunt multi-purpose polypropylene rope has an outer braided sheath with a core made of fibrous material. Similar-looking specialist climbing ropes made of polyamide (nylon) or a combination of polyamide/polypropylene also have a braided sheath, but with a vastly superior filament core. The Grunt rope also has a lower breaking strength (250kg).

We caution consumers against using Grunt rope for climbing or other critical safety type applications; it should only be used for its intended "multi-purpose" use, such as tying down things in a car trailer. Rope used for climbing should be purchased from a specialist outdoor store with the advice or assistance of someone with appropriate training.

## Holiday horror

I was recently given an Apple iPhone linked with Telstra. I then went to the US for 10 days, where I used my phone sparingly to make and receive calls and send text messages. You can imagine my shock when I got home to find a bill that included \$800 for global roaming. Apparently I was supposed to know to turn data roaming off when overseas. Because I hadn't, I was basically charged for every minute I had my phone switched on in the US.

My dealings with Telstra have been horrendous, with many hours on the phone. Is it worth trying to negotiate with Telstra to reduce this cost, or do I just have to learn the hard way? I never had this problem before when I travelled overseas using prepaid phones with Optus, my previous provider.

I'm very frustrated and hope we can get some consumer action on this issue.

**Ralph Hampson, Newport, Vic**

**CHOICE SAYS** If your complaint isn't resolved by Telstra, you can raise it with the Telecommunications Industry Ombudsman ([tio.com.au](http://tio.com.au)). In general, while not condoning these ridiculous costs, we recommend that in order to avoid them, consumers familiarise themselves with their phone's settings and contract terms, especially before going overseas. This way you can turn data roaming on or off as needed (the default setting for international roaming with iPhones is off, so Ralph's may have accidentally been switched on at some point before he left). In addition:

- Make sure you know how to monitor ongoing costs at any time.
- Check with your provider to see if they can enable/block data roaming, if it's not needed.
- When travelling, you can turn off "push" notifications for the phone, so it won't automatically fetch data unless you tell it to.
- iPhone users can also easily turn on "Airplane mode" (sic.), which cuts off all 3G connection and effectively turns the iPhone

## THUMBS UP!

**Erni Tinesz**, of Stirling, SA, is full of praise for Canon's customer service. "I sent my 2004 IXUS 500 camera for a repair quote, and after being quoted a price that was more than the camera was worth, I wrote back with instructions to throw the camera away as I couldn't afford the repairs. Canon fixed the non-working viewing screen problem for free. I'll definitely be buying Canon again."

**Mrs R. Garden** of Darwin, NT, would like to give a thumbs up for Caprice Australia's excellent service. After her husband purchased some timber venetian blinds, she discovered one of the supporting brackets was faulty. She emailed Caprice explaining the problem, and within an hour one of their staff called back to confirm the problem and promptly posted a full set of replacement brackets, at no extra cost.

**John Hourigan** of Marion, SA, contacted Modern Floors seeking repairs to his vinyl flooring. The free repairs were carried out in the afternoon of the same day, even though the flooring had been laid 10 years earlier.

**Joan F. McKenzie** of Bentleigh, Vic, reads *CHOICE* on her train ride to work "for three whole days [both to and from work] as there's so much information. Well done everyone!" Thanks Joan, and keep reading.

into the equivalent of an iPod Touch (that is, no phone connectivity). You can also turn off Wi-Fi connections separately. To be safe, when travelling you could turn off Airplane mode only when you need to make calls, get data and so on, thus giving you full control over charges.

## What about AMP First?

In Freedom From Fees, *CHOICE* April 2010 (page 73), I was surprised at the limited attention paid to the AMP First account, which seems to me every bit as good as those you recommend.

Even though this account charges \$5 per month, an average account balance of \$1225 at an interest rate of 4.9% (now 5.15%) earns the \$60 needed to nullify these fees annually. Also, cheques are free, online banking is available and ATM withdrawals are free

at NAB and RediATMs. All the while, this account earns a healthy rate of interest for an everyday account – and unlike many of the accounts you recommend, no minimum deposit of \$2000 or more per month is required.

For an account that combines the advantages of an everyday account with the interest rate of a savings account, AMP First is hard to beat. It saves me the hassle of having to check every month that a separate everyday account has a sufficient balance to pay off the credit card and direct debits for all our household expenses, while at the same time maximising interest.

Jon Ladbroke, West Pymble, NSW

**CHOICE SAYS** AMP First fell short of our recommended everyday accounts because of its penalty fees (\$18 for overdrawn

accounts, \$40 for dishonoured direct debits) and a \$5 monthly fee (although as Jon points out, interest earned may offset this fee).

Our two Best Buy low-fee bank accounts, ING Direct Orange Everyday and NAB Classic Banking, have no penalty or monthly fees, and no fees for most everyday transactions.

However, we're pleased to see that accounts from a wide range of institutions, including AMP, are becoming more competitive. We highlighted AMP First as a transaction account that pays reasonable interest, whereas our Best Buys and many other transaction accounts do not (so your extra savings are best directed elsewhere).

We thank Jon for reminding us that some consumers prefer not to have to juggle their finances between separate transaction and savings accounts.

## LETTER OF THE MONTH

### Just another bank, after all

ANZ has been running an extensive advertising campaign highlighting the bank's customer focus as being a cut above the other banks. My recent experience, however, would indicate the bank still has a long way to go for this to be true.

Last June I purchased the ANZ Travel Card for a trip to Europe (see Consumer News, *CHOICE* February 2010, page 9). On my return, I cashed in the card to convert the remaining Euros into Australian Dollars (AUD), but ended up being out of pocket by several hundred dollars as the conversion rate appeared to be weighted very much in favour of the bank.

I wrote to ANZ's travel money department in October but received no reply. I wrote again in early November, again without reply (or even acknowledgement), so I contacted the Financial Ombudsman. Only then did I get a response from the bank – a phone call offering me \$300 "in settlement" for the "inconvenience". I accepted the offer even though I believed it was quite inadequate,

but felt that as an individual, I was unlikely to receive any greater compensation.

My acceptance in no way negated my objection to the principle of ANZ heavily weighting the exchange rate for its Travel Cards against the customer and in its own favour.

Harold Levien, Dover Heights, NSW

**CHOICE SAYS** It's disappointing that your complaint was not taken seriously until the Ombudsman was notified. Consumer lawyers say customer complaints often get mysteriously "lost" in financial institutions' complaints processing systems, and that involving the Ombudsman is often the only way to make progress (see Get Up, Stand Up, *CHOICE* May 2010 page 64, or contact the Financial Ombudsman Service at [www.fof.org.au](http://www.fof.org.au)).

ANZ told us the \$300 was offered as a gesture of goodwill to help cover exchange rate movements experienced between buying and selling the Travel Card.

"Because of currency market fluctuations, the AUD equivalent value on the card may

go up or down relative to the AUD at the time of purchase," said an ANZ spokesperson. "As for the rates available, these are actually more favourable to the customer than if they were buying foreign currency cash. For example, if a customer were to have purchased Euro cents on 20 May, \$1 would have bought 65.18 Euro cents in cash, and 65.94 Euro cents on a Travel Card. Similarly, if a customer was transferring any remaining value from a Travel Card on the same day, they would have received A\$1 for each 73.35 Euro cents in cash, and A\$1 for every 71.14 Euro cents on a Travel Card."

But consumers should also consider other costs that apply with these cards.

ANZ charges an \$11 initial load fee, 1.1% reload fee, ATM fees and various "monthly inactivity fees".



**LETTER OF THE MONTH** Harold receives *Recession-Proof Your Finances*, or any other book of his choice at [www.choice.com.au/books](http://www.choice.com.au/books). Unfortunately we are unable to answer all the emails and letters we receive. We may edit or print only an extract of emails and letters.

# YOUR SAY – ONLINE

Some of the issues running hot at CHOICE Online ([www.choice.com.au](http://www.choice.com.au)) include controversy around the merits of the new Apple iPad as an eBook reader, and members' favourite brands that were omitted in our recent test of electric heaters. Simply sign up as a guest or join as an online member to add your comments to any article.



## Ebook readers and the iPad

- [www.choice.com.au/ebook-readers](http://www.choice.com.au/ebook-readers)
- [www.choice.com.au/ipad](http://www.choice.com.au/ipad)

The arrival of the iPad has stirred fierce debate, coinciding with the release of our eBook reader review online. In a separate First Look at the iPad, we weighed up its merits as an eBook reader, and it seems there's little grey area when it comes to who likes what device – users are firmly wedded to their favourites. Comments have also revealed a lot of confusion and frustration around the availability of eBooks, with some retailers apparently failing to deliver on their lavish promises. If you haven't done so already, check out our video of the iPad in action – log on to the second URL above.

### Brett Quinlan:

One of the key reasons I bought the Kobo eReader was because Borders has two million titles available online. When I searched for my favourite authors, however, none were found. I dug a little deeper and found only 10,000 titles were available.

When I called Borders, they acknowledged problems, said they would be fixed in a couple of weeks and gave me the URL for the Borders Australia forums. Since then, another 10,000 titles have become available and I requested an update from the Borders forums. The initial replies were quick,

admitting they still weren't there yet, and in fact the number was closer to 1.8 than 2 million. Borders has since deleted that thread. Now, is it just me or is it somewhat unconscionable to be advertising something they don't have in order to sell eBook readers?

### Michael Berkeley-Hill:

I have an Amazon Kindle and a 3G/Wi-fi 64GB iPad. As a pure e-Book reader, I believe the Kindle is superior, as the non-backlit screen is much easier on the eyes for extended reading and its e-Ink display means significantly longer battery life. The iBook library on the iPad gives you one free book (*Winnie the Pooh*) and currently the remaining choices are only older classic titles.

The only significant difference I can see is that the Kindle books are plain text with occasional monochrome illustrations, whereas the iBook title provided has colour pictures in it. As an owner of Kindle books, you can download a free Kindle reader application (fully optimised for the larger iPad screen) that allows you to read all your Kindle books on the iPad. You can also order additional books from the Kindle store and download those to the iPad.

### Juanita Engelbrecht:

I am quite satisfied with my Kindle 2. The ordering process through Amazon was quick and easy. I did buy an extra charging kit with an AC charger and car charger, which I honestly have not needed to use. They include a USB cable and it charges easily while plugged into your computer. I have about 21 pages of FREE books – some directly available from Amazon, most from Gutenberg. The .mobi format works on the Kindle; I download them to my computer and drag them to my Kindle.

## Electric heaters

- [www.choice.com.au/electric-heaters](http://www.choice.com.au/electric-heaters)

Our test of electric heaters threw up a thorny issue, and one that often affects our testing timetable – products that weren't available at the time of purchase for a test and that later emerged as the most requested models. We're currently looking at how we can better accommodate these latecomers.

### Warwick John Pitt:

I was disappointed the two premium panel heater brands weren't included: Nobo and Noirot. We have a Noirot heater in each bedroom and are very happy with them, but often wonder whether we should have bought cheaper, less efficient heaters, given that only one of them remains on throughout the night (in a baby's room). Chances are, yes, but I would be interested to see how much more efficient the expensive heaters are in comparison to the cheapies.

### Faye Sampson:

I also can't believe you didn't test Nobo. I'm particularly interested in how much they cost to run as the company itself claims they are the cheapest. The other point I'm interested in is how long they last; we already have enough trash...







## SUPERANNUATION

### Super challenge

CHOICE is working hard to ensure a more secure future for all retirees.

**M**ore of your income is likely to be directed towards superannuation than any other purchase bar your mortgage, so stringent checks and measures are needed to protect your financial future. CHOICE has made several submissions to the Super System Review (a review into the governance, efficiency, structure and operation of Australia's superannuation system), which will deliver its findings to government soon. The following four key areas are of greatest concern for consumers.

#### 1. Reducing fees and costs

CHOICE would like to see super fees and charges capped at one per cent. Most schemes should provide services for less than this. Sales commissions to advisers should be removed, so consumer advice is free from bias and advisers aren't pushing products that benefit them rather than their clients. Consumers should be able to consolidate their accounts more easily to reduce the number of "lost" or "inactive" super funds. There needs to be better quality information about super funds and fees that's easy to understand, as well as greater facility to compare funds.

#### 2. Improving standards for default funds

Because some employees don't nominate a preferred super scheme, employers may end up placing their contributions in a default scheme. Standards for default schemes need to be improved to include basic features such as low fees, appropriate portfolio selection, and minimum amounts of Death and Total & Permanent Disablement (TPD) insurance.

When you seek advice about a personal pension plan, you're likely to have a large lump sum at your disposal. There are too many examples of unscrupulous advice, scams, the use of high commissions and pressure selling

at this time. Default standards need to be established for financial products tailored for when we've stopped working and earning, and want to start turning our nest egg into an income stream to provide for our retirement.

Improved information needs to be made available to retirees. CHOICE and other advocates are concerned about the limited availability of independent advice, especially given the heavy pressure and commission-driven sales tactics faced by many retirees (turn to page 34 for advice on how to find an independent financial planner).

#### 3. Improving super insurance products

Traditional super funds usually come bundled with insurance products – a tax-effective way to pay for your insurance premiums as the dollars spent are pre-tax. It's also cheaper and less painful, because you don't have access to the money going out of your pay.

Currently, there's a mandatory minimum life insurance component of super set at \$50,000, which is inadequate. We also believe that TPD insurance, which is optional in default funds, should be mandatory. TPD provides protection for individuals and their families in the event of serious injury affecting their income-earning capacity. It also spares the broader community the excessive costs of supporting a seriously injured person.

#### 4. Establishing a well-resourced, independent advocacy organisation

CHOICE is concerned about the significant imbalance between the representation of superannuation members and industry interests in the sector. There is no independent advice service available to super members prior to retirement. Nor is there a dedicated advocacy organisation that can represent members' interests in policy debates, law reform and inquiries, or a source of independent research on issues affecting members.

We've been asking governments to resource an independent organisation for superannuation members for years. There can be no better time to finally realise this justified demand. **CHRISTOPHER ZINN**

**CHOICE  
ONLINE**

Go to [www.choice.com.au/super](http://www.choice.com.au/super) to tell us your super story and read our top tips on making your super work for you.



## NUTSHELL

>> CHOICE and an environmental consultant conducted "sustainability audits" of three households to assess how green they are, focusing on waste, harmful chemicals, and energy and water.

>> In the past year we've uncovered safety issues around nanotechnology, pesticides and plastics regulation in Australia – all relating to products that can be found in most homes.

>> We provide some practical suggestions for anyone who is interested in reducing the chemical load in their home.

# The greener living challenge

In our special three-part report on sustainable living, three families in three cities go under the sustainability microscope. This month, we look at harmful chemicals in their homes.

STORY KATE BROWNE

**L**ast month, CHOICE introduced three families keen to better manage and improve their sustainable lifestyle (see *CHOICE*, June 2010, page 14). In the first part of our report, we examined how they cope with waste; this month, we look at commonly used chemicals in their homes.

## Chemicals in the home

In the past 12 months, CHOICE has reported on everything from risky plastic packaging to pesticides banned overseas but still available in Australia. There's more work to do, because we're now more reliant than ever before on chemical-based products in the home.

## MEET THE FAMILIES



### The Freigans: ACT

Emily and Adam Freigan live in Canberra with their two young children, Leo and Nellie. While they're keen to make sustainable improvements to their 1950s home, they're not terribly handy.



### The Canavans: Queensland

Margo and Barry Canavan live in Brisbane with their 14-year-old grandson, Damon, and two dogs. Their brick house is only 10 years old, and Margo is passionate about living sustainably.



### The Harnacks: New South Wales

Phoebe and Mark Harnack live in Sydney in a two-bedroom apartment. Both are eager to make as many sustainable improvements as possible, but living in an apartment comes with its own restrictions.

From surface cleaners to pest control, laundry products to cosmetics, many ordinary household products contain chemicals known or suspected to be hazardous to our health.

## In the kitchen

There's growing evidence that food can be contaminated by harmful chemicals in some types of plastic. Two of particular concern are:

- **Polycarbonate** (used in some food storage containers and bottles, particularly for babies and small children) and the epoxy resin lining cans, which can release bisphenol A (BPA), a chemical that experts believe can cause serious health problems. BPA can enter food via polycarbonate food containers and drink bottles, especially after washing in a dishwasher.
- **PVC** (used to make bottles, cling wrap and seals for screw-cap jars) contains plasticisers. PVC is hard and rigid, so plasticisers are added to make it flexible. Phthalates and DEHA (di-(2-ethylhexyl) adipate) are plasticisers often added to PVC used for food packaging. Recent research raises doubts about their safety.

BPA and phthalates are endocrine disruptors, meaning they mimic natural hormones and can cause health problems. They're hazardous at high levels, and although opinion is divided, there's evidence to suggest even low levels of phthalates and BPA in our food may cause infertility, obesity, breast and prostate cancer, heart disease and diabetes.

In the ACT, the Freigans are concerned. Although they found no plastic containers, drink bottles or packaging labelled code 3 or 7 in their home (see Take Action on Plastics, below), not all the plastic containers were labelled (the identification code is voluntary at present) so it's impossible to know if they are harmful.

Margo Canavan in Brisbane checked her plastics and was pleased to find none of the banned ones.

Our audit for the Harnacks in Sydney uncovered PVC. Several washed and reused drink bottles had the number 3, and a plastic container used for crushed garlic had the number 7 – the catch-all code that includes polycarbonate.

## TAKE ACTION ON PLASTICS

- Avoid plastic food packaging and baby products made from plastics you can't identify.
- Avoid food packaging and baby products with identification codes 3 (PVC) or 7 (a catch-all category that includes polycarbonate).
- Avoid PVC cling film used by supermarkets and delis to wrap cheese, fresh meat, fruit and veg.
- Cut down on canned foods, which may contain BPA in the plastic lining.

## Food colours

A 2008 UK study concluded that a range of food colours can affect children's behaviour. The UK has since called for a voluntary ban, but in Australia our regulator, Food Standards Australia and New Zealand (FSANZ), is not working with manufacturers to remove the six identified colours from the food supply (see Take Action on Food Colours, below).

In Brisbane, Margo Canavan found products containing these colours. Margo is only too aware of the food colouring hazard, as her daughter was diagnosed with ADHD. "I strictly limit how much goes into anyone near me," she tells CHOICE. Cordial, ice-cream and ice-blocks for grandson Damon all contained some of the six colours, so are "an occasional treat only".

The Freigans in Canberra found some of the colours in custard powder and food dyes.

The Harnacks in Sydney couldn't find any foods with these colours in their home.

## In the bathroom

From cosmetics to antibacterial products, heavily fragranced liquid soaps and sunscreen, the bathroom is another hot spot when it comes to chemicals in the home.

Phoebe Harnack in Sydney "studiously avoids antibacterial products". She adds that she was unaware of the risks of nanotechnology used in cosmetics and sunscreen. "I only wear cosmetics occasionally and use sunscreen that doesn't leave white streaks. Now that I know they may contain nanoparticles, I'll buy differently."

In Brisbane, Margo Canavan keeps antibacterial liquid soap for her grandson to use after football. She prefers a solid vegetable soap, avoids products with fragrance and doesn't use cosmetics because of her allergies.

Emily Freigan in Canberra likes to keep things simple. "I use very few products on the kids," she says. "After using baby wipes, almost straight away Nellie had nappy rash, so I switched to water and a cloth and she's been fine ever since."

## In the laundry

Australians spend a fortune on cleaning and laundry products (see Number Crunch, page 16). Many don't raise health concerns, but contribute to environmental pollution in our homes and further afield. They are also often over-packaged from non-renewable materials. >

## TAKE ACTION ON FOOD COLOURS

Check your labels and avoid:

- Tartrazine [E102]
- Quinoline Yellow [E104]
- Sunset Yellow [E110]
- Carmoisine [E122]
- Ponceau [E124]
- Allura Red [E129]



**CHOICE  
ONLINE**

Go to [www.choice.com.au/hazardouspesticides](http://www.choice.com.au/hazardouspesticides) for a list of chemicals and products deregistered by the EU but still available in Australia. For CHOICE's comprehensive guide to plastics, go to [www.choice.com.au/plastics](http://www.choice.com.au/plastics)



## TAKE ACTION IN YOUR LAUNDRY

- **Avoid phosphates**, which are used to make hard water alkaline. Algae love phosphates, which contaminate drinking water and kill marine life.
- **Choose biodegradable products** that are not excessively packaged.
- **Avoid chlorine-based bleaches**. They produce environmentally damaging mercury and dioxins as by-products. Chlorine bleaches can also leave dioxin residues, which are believed to be linked to health problems.
- **Choose multi-purpose rather than individual cleaners** for each job.
- **Use microfibre cloths** that clean without chemicals and are hypoallergenic (see CHOICE, February 2010, page 54, for our testing of microfibre cloths).

## TAKE ACTION IN YOUR BATHROOM

- **Avoid antibacterial cleaners** that kill both harmful and beneficial bacteria. Overusing them could weaken your immune system. Products to avoid include liquid antibacterial soaps and toothpastes containing triclosan.
- **Avoid heavily fragranced products**. Allergy and asthma sufferers should avoid synthetic fragrances that cause inhalation allergies. The word "fragrance" covers dozens of different chemicals that can cause allergic reactions.
- **Choose products in pump packs** rather than aerosol sprays as they are less likely to cause respiratory irritation. They also deliver a measured dose without waste.
- **Avoid nanoparticles**. These are most commonly found in sunscreen and cosmetics and are not required to be listed in the ingredients list on labels. Currently, if you want to find out if a product you are using contains nanoparticles, the only way to do so is to contact the manufacturer directly and ask.

< **Margo Canavan in Brisbane** opts to keep it simple. "I'm asthmatic, so I use as few chemicals as possible. I mop floors with hot water and use microfibre cloths on the windows," she says.

The **Freigans in Canberra** don't have a lot of cleaning products, but a cleaner comes in each fortnight. "I'm not sure what they use but it smells a bit chemical," says Emily. "There's a strong association that this smell equals clean." Adam says they're trialling a phosphate-free laundry liquid. "Earth Choice is washing like the other stuff, so we'll keep using it. We use Napisan, though, because of the kids."

**Phoebe Harnack in Sydney** also uses as few products as possible, but Mark "likes the correct product for the job". Phoebe admits there may be "some influence from advertising there. We got a year's supply of Omo with our washing machine, but eventually we'll switch to a phosphate-free one."

### Pest control

Cockroach baits, termite and ant treatments, household surface sprays, flea shampoos and head lice treatments keep our homes pest-free. The downside is that residues breathe in or absorbed by our skin all add to our chemical load.

In **Brisbane**, **Margo Canavan** keeps her dog's fleas under control with a monthly spot chemical treatment and grows citronella in her garden to deter mosquitoes.

Our **Canberra family, the Freigans**, found a can of low-irritant fly spray in their cupboard. The only other risky product they found was a pack of ant baits with finopril.

**Phoebe and Mark Harnack in Sydney** use cockroach baits in their kitchen. "We have some spray, but we've only ever used it on crickets," says Phoebe.

## CHOICE VERDICT

Regulation of chemicals in Australia needs overhauling to ensure effective products reach the market while protecting the health and safety of consumers, workers and our environment. Even if scientific evidence is not yet comprehensive, there is enough to question assumptions around "safe" exposure levels of toxic chemicals. The onus should be on manufacturers to prove safety, not on consumers to prove harm. ■



## TAKE ACTION ON PEST CONTROL

- **Avoid pest control products that contain:**
  - Organochlorines or organophosphates
  - Lindane
  - Naphthalene
  - Disulfoton
  - Benzyl
  - Benzoate
- **Avoid insect sprays**. Invest in flyscreens and a swat, or opt for a pyrethrin product that is lower in toxicity.
- **Avoid mothballs**, a petroleum-derived product that contains toxic chemicals such as naphthalene.

## NUMBER CRUNCH

**\$300m**

The approximate amount spent on cleaning products by Australian shoppers in 2009.

**\$154.6m**

The approximate amount spent on laundry products.

STORY BIRGITT BAADER

## Watch this (empty) space

Any trip to a supermarket, pharmacy or department store finds plenty of products packaged with lots of empty space. CHOICE asks manufacturers to explain why.

### NUTSHELL

- >> Excessive packaging in itself is not considered misleading conduct.
- >> There are a few steps consumers can take to avoid deceptive packaging.

**H**ave you ever torn open a packet of chips in eager anticipation, only to discover the bag is half-empty? Ever opened a box of snack bars to find they're much smaller than you expected? Or discovered that expensive jar of moisturiser is only half the size of the box it comes in? Don't worry – you're not alone.

### Regulating product packaging

In Australia, food packaging is administered under state and territory trade weights and measurements acts. While the federal *Trade Practices Act* and the various states' fair trading acts include provisions against false and misleading conduct, excessive packaging in itself is not considered misleading.

The Australian Competition & Consumer Commission (ACCC) is responsible for ensuring businesses don't misrepresent their products or create an impression that could mislead consumers. In its *Food Labelling Guide 2009*, it specifically mentions that to reduce the possibility of misunderstanding, "labels and packaging should be designed on the basis that some consumers may make their purchasing decisions on the basis of the product's labelling and packaging..." But as far as CHOICE can ascertain, any action taken has related to misleading claims on labels and packaging, not to the packaging itself.

Misleading packaging is difficult to prove, as products are sold by weight or volume, which is usually stated on the packaging. If it says "350g" or "4 bars" on the packet, that's what must be inside, and that is what is regularly checked by fair trading agency officers to ensure consumers are getting what they pay for. Whether there's room for a fifth bar, or another 50g of product, isn't specifically addressed in the relevant regulations.

### Costs to our environment

It's not just consumers who benefit from fair packaging. If less air were squeezed into packaging, fewer resources

would be used and greenhouse gases created in the production of packaging materials, and less space would be taken up in landfill.

Writing on this issue in the US, Dr Michael F. Jacobson, Executive Director of the Center for Science in the Public Interest, recently called on the Food and Drug Administration and state legislators to crack down on excessive "slack fill" in food packaging. "If consumer deception isn't grounds enough for change, there are plenty of environmental reasons. Trucks could carry more packages if manufacturers squeezed out the air. And we'd all have more room in our cupboards."

### Snack pack issues

Snack foods of a fragile nature, such as chips or crackers, are generally loosely packaged and padded by air to protect them from being crushed and ending up as crumbs. A reasonable amount of empty space, or "air cushioning", is permitted by law – 25% for cereals, for example, and 40% for delicate snack foods.

According to Ian Greenshields from Goodman Fielder, manufacturer of the Veri Deli brand, a bag of *Rosemary & Sea Salt Cracker Snacks* (picture 1, page 18) "has 22% free air space, which is well within the allowable limit". Yet when you open the bag – and after the contents have settled – the air space looks decidedly bigger than this.

Even the time when potatoes are harvested can have some bearing on the air content in packaging, as is the case with *Kettle Chilli Slow Cooked Chips* (2, page 18). "They vary in density throughout the growing season, which means at certain months of the year the chips take up more space in the pack for the same weight than at other times," says Matt Jenkins from Snack Brands Australia, manufacturer of Kettle Chips. "Our packaging has to accommodate this variation in size and density." >





1

2



5



4



Misleading packaging can be difficult to prove as products are sold by weight or volume, which is usually stated on the pack

### Watching their weight

< "We always aim to ensure that the [product] volume is at least 70%, typical of industry targets," says Bryce Howard, spokesperson for Tasti Products (which manufactures WeightWatchers Macadamia & Cranberry Cereal Nut Bars (3) under licence). But without their plastic wrappers, and neatly packed next to each other, these bars leave a lot of empty space in the cardboard box in which they come.

Howard told CHOICE the company uses the same size boxes for different products to make the production process more efficient, allow for machine tolerances (because the ingredients vary in size and density by season and source location) and accommodate the machines' extreme high operation speeds. Go Natural (4) did not respond to our query.

### Monster size

This is indeed a very large bag for 700g of **Monster Muesli Lite** (5) (which is no longer made in this size), even if it does contain a high percentage of lighter ingredients such as puffed grains and rolled barley, which need some settling space after packaging.

**Fresh Mate Tropical Muesli 750g** (5) is proof that the same quantity, or even a little more, can fit into a much smaller bag. But according to Monster Muesli's Kim Lauman: "Consumers hate it when they open a cellophane bag and everything spills out. They love that our bag [made from food-grade polyethylene] tears across the top and is resealable. It's also reusable and people tell us they use it for their packed lunch."

### Which bag of sugar is bigger?

These two packets (6) each contain 1kg of raw sugar, but one uses more packaging than the other and takes up markedly more shelf space – and is, therefore, more likely to attract

your attention in the supermarket than the smaller packet. One theory is that it's designed to make you think you're getting more than from the competitor's brand.

The manufacturer of the larger bag offers other reasons for its choice of packaging. Sugar Australia, which makes CSR products, says while the bags used for its white and raw sugar are of similar size, the packaging material and design are different for each. The white sugar bags are made of paper and the head space is folded and glued down, whereas the bag for raw sugar is plastic and not folded over. The company says this is because raw sugar is hygroscopic, meaning it takes up and retains moisture readily, so plastic bags provide better protection.

In addition, "raw sugar is free-flowing, so crystals are likely to get caught in the seal [of a folded-down bag], hence the need for head space in the bag," says spokesperson Martin Cole. Brown sugar, on the other hand, is more solid and needs less head space.

### Orgran – doing the right thing

Some manufacturers have shown initiative and reduced or are reducing their products' packaging. The 250g **Orgran Gluten Free Buckwheat Pasta Spirals** (7) we bought, for example, only filled about half the packet, supposedly because of the packaging machine's capabilities. But the company is currently investigating whether further cuts to pack sizes can be made. "We're making the investment into a more environmentally friendly manufacturing process, with a view to further reduce the packaging," says spokesperson Matthew Alessi.

The cellophane bag inside this 170g packet of **Ital Classic European Almond Toscani Biscotti** (8) is much smaller than the cardboard box, and it's only half-filled. But Ita's Robert Angele told CHOICE the company has taken on board consumer concern and is currently adjusting its packaging. The new boxes should hit the shelves in August.



### Extra 'walls' and too many words

Excessive packaging isn't just limited to supermarket food aisles; cosmetics and pharmaceuticals are also often sold in large packages that could easily hold more. Unless you know how small a 20g tube of cream is, you'll get a surprise when you open this cardboard box with **Nair Sensitive Precision Facial Hair Remover Cream** (9) inside. Not only is it far too large, it also has extra walls inside to fit the small tube tightly.

According to Catherine Thorley from Nair, these walls are required for "production efficiency, to allow the product to be packed on a line without manual labour and therefore minimising the cost to the consumer. If the carton were as small as the tube, the product could easily be stolen, would be difficult to merchandise, and consumers would have difficulty locating the product on the shelf, as the majority of depilatory cream products are 100mL or more."

However, it's difficult to accept potential theft as a defence to this packaging, as there were many smaller products for sale in the pharmacy from which we purchased the cream. As far as deceptive packaging goes, we believe this is definitely pushing the boundaries. We're pleased to hear it's currently under review.

The manufacturer of **Cenovis Ginkgo Biloba 2000** tablets (10) argues that all the information that needs to be included on the label won't fit onto a smaller bottle in the correct font and style. But what about the other Cenovis tablets that are sold in smaller bottles? "It needs to be looked at on a case-by-case basis," says spokesperson Will Collie. "It depends on the specific information that is available and needs to be disclosed."

### CHOICE VERDICT

A spokesperson for Consumer Affairs Victoria told CHOICE that "while there may be limited legal recourse against what may be considered excess packaging, we believe

traders should do all they can to avoid leaving consumers feeling ripped off, and provide transparency in their products to encourage brand and product loyalty". We wholeheartedly agree. Excess and unnecessary packaging can also have an environmental impact.

A number of industry codes and voluntary guidelines such as the Australian Packaging Covenant (APC) and Environmental Code of Practice for Packaging (ECoPP) encourage sustainable packaging. We'd like these initiatives to specifically discourage over-packaging. Where excess packaging is needed, it should be made from material that is widely accepted by local recycling facilities and be clearly marked with the relevant recycling number. Where packaging is made from a mixture of materials, they should be easy for consumers to separate and recycle. ■

### WHAT YOU CAN DO

- **Check the weight of the package or the number of items it contains** A larger package doesn't always mean more contents.
- **Compare prices for a comparable unit by volume or weight** Unit pricing allows you to compare prices easily between grocery products packaged in different sizes. It's now mandatory for larger store-based, online and grocery retailers.
- **Don't buy a product if you believe it's deceptively packaged** Let the company know why you're rejecting it and, if you're concerned you've been misled, report the matter to the ACCC or your state or territory's Office of Fair Trading.
- **Recycle all packaging** that can be recycled in your area. Check with your local council or at [www.recyclingnearyou.com.au](http://www.recyclingnearyou.com.au).

If less air were squeezed into packaging, fewer resources would be used



## NUTSHELL STORY RACHEL CLEMONS

>> A US survey of more than 21,000 people reveals six secrets of the slim.  
>> "Naturally" slim people don't rest on their laurels; their eating and exercise habits are very similar to those of people who've successfully lost and kept off weight.

# The secrets of slim people

Are slim people just genetically favoured, or do they have to work at keeping down their weight too? A huge US survey provides the answer.

**A**lthough the majority of Australians and Americans are overweight or obese by middle age, an enviable minority stay slim. Are they just genetically favoured? Or do they have to work at keeping their weight down?

To find out, *Consumer Reports*, the magazine of our US sister organisation, Consumers Union, asked its subscribers about their lifetime weight history and eating, dieting, and exercising habits (see About the

Survey, opposite). Their responses and feedback are every bit as relevant to Australian as to US consumers.

## Staying slim all by yourself

People who've never been overweight aren't sitting in a recliner with a bowl of chips on their laps. In the group of "always-slim" respondents, just 3% said they never exercised and ate whatever they pleased. The habits of the vast majority of always-slim people are very much like those of people who've successfully lost weight and kept it off. Both groups eat healthy foods such as fruits, vegetables and whole grains; they also eschew excessive dietary fat, practice portion control and exercise vigorously and regularly. The only advantage the always-slim have over the successful dieters is that these habits seem to come a little more naturally.

"When we compare people who are maintaining a weight loss with those who've always been a healthy weight, we find that both groups are working hard at it; the maintainers are just working a little harder," says Suzanne Phelan, PhD, co-investigator of the US National Weight Control Registry, which tracks people who've successfully maintained their weight loss. For *Consumer Reports'* successful losers, that meant exercising a little more and eating with a bit more restraint than an always-slim person, as well as using monitoring strategies such as weighing themselves or keeping a food diary.

Encouragingly, more than half the successful losers reported shedding the weight themselves, without the aid of a commercial diet program, medical treatment, book or diet pills. This confirms what *Consumer Reports* found in its 2002 diet survey, in which 83% of "superlosers" – people who'd lost at least 10% of their starting weight and kept it off for five years or longer – had done so entirely on their own.

## Six vital stay-slim strategies

Through statistical analyses, *Consumer Reports* identified six key behaviours that correlate most strongly with having a healthy body mass index (BMI). By following these strategies, you too can live quite literally like a slim person.

**1 Watch portions** Of all the eating behaviours, carefully controlling portion size at each meal correlated most strongly with having a lower BMI. Successful losers – even those who were still overweight – were especially likely (62%) to report practicing portion control at least five days per week. So did 57% of the always-slim, but only 42% of failed dieters.

**2 Limit fat** Specifically, this means restricting fat to less than one-third of your daily kilojoule intake.

Fifty-three per cent of successful losers and 47% of the always-slim said they did this five or more days a week, compared with just 35% of failed dieters.

- 3 Eat fruits and vegetables** The more days that respondents ate five or more servings of fruits or vegetables, the lower their average BMI. Forty-nine per cent of successful losers and the always-slim said they ate that way at least five days a week, while just 38% of failed dieters did so.
- 4 Choose whole grains over refined** People with lower body weights opted for wholegrain breads, cereals and other grains over refined (white) grains more frequently than failed dieters.
- 5 Eat at home** As the number of days per week respondents ate restaurant or takeaway meals for dinner increased, so did their weight. Eating at home saves money, too – see *Healthy Eating on a Budget*, page 23.
- 6 Regular vigorous exercise** The type of exercise that increases heart rate for 30 minutes or longer was strongly linked to a lower BMI. Although only about one-quarter of respondents said they did strength training at least once a week, the practice was significantly more prevalent among successful losers (32%) and always-slim respondents (31%) than it was among failed dieters (23%).

All these strategies (except number 5) are highlighted in the Dietary Guidelines for Australian Adults, developed by the government's National Health and Medical Research Council (NHMRC). This shows that putting healthy eating advice into practice really pays off.

### Going 'low carb' makes no difference

One popular weight-loss strategy absent from this list is lowering your carbohydrate intake. *Consumer Reports* asked about this in its survey, and found that limiting carbohydrates was actually linked to higher BMIs. While this doesn't necessarily mean low-carb plans such as the Atkins or South Beach diets don't work, the findings suggest that cutting carbs alone, without exercise or portion control, may not yield great results.

Other strategies that didn't seem to make much difference were eating many small meals, not eating between meals and including lean protein with most meals.

### Realistic expectations

Sixty-six per cent of the survey respondents, all subscribers to *Consumer Reports*, were overweight as assessed by their BMI – similar to the US population as a whole. One-third of this group, or 22% of the overall sample, qualified as obese. Australia has similar levels

of combined overweight and obesity at about 60%, with 20.8% of all adults qualifying as obese.

Although this may seem discouraging, the survey revealed that respondents did much better at losing weight than published clinical studies would predict. Though such studies deem success if participants are 5% lighter after a year, *Consumer Reports'* successful losers had managed to shed an average of 16% – about 15kg – of their peak weight. They had an impressive average BMI of 25.7, meaning they were just barely overweight (see *Are You Overweight?*, right).

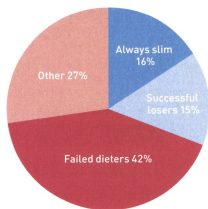
A key to success is keeping your expectations in check in order to avoid becoming discouraged and giving up. While 70% of respondents said they wanted to lose weight, *Consumer Reports* found that their goals were modest when asked how many kilos they hoped to take off. Most wanted to lose 15% or less of their overall body weight; 65% sought to lose between 1% and 10%. >

## ABOUT THE SURVEY

A total of 21,632 *Consumer Reports* readers completed a 2007 survey. They were separated into three main categories:

- **Always-slim** are people who've never been overweight (16% of the sample).
- **Successful losers** are people who, at the time of the survey, weighed at least 10% less than they did at their heaviest, and have kept the weight off for at least three years (15% of the sample).
- **Failed dieters** are people who said they'd like to slim down, yet still weighed at or near their lifetime high (42% of the sample).

The remaining 27% of respondents (such as people who had lost weight more recently) didn't fit into any of these categories.



## ARE YOU OVERWEIGHT?

A body mass index (BMI) from 18.5 to 24.9 is considered healthy; 25-29, overweight; 30+, obese. Less than 18.5 is considered underweight. To calculate your BMI, divide your weight (in kilograms) by your height (in metres) squared.

## THANK YOU

Our thanks to *Consumer Reports* for allowing us to share the results of their survey with *CHOICE* readers. Thanks also to Dr Rosemary Stanton for confirming the relevance of the US survey findings to Australians, and for supplying the appropriate health and nutrition statistics to give local context.

**"Successful losers" tend to have similar dietary strategies to "always-slim" people – and apply them more frequently than "failed dieters"**

## What you can do

< *Consumer Reports* findings show key behaviours common to people who have successfully lost weight and to those who've never gained it in the first place. Embracing some or all of the six strategies may increase your weight-loss success. In addition, consider these tips:

- **Don't get discouraged** Studies show that prospective dieters often have unrealistic ideas about how much weight they can lose. A 10% loss might not sound like much, but it can significantly improve overall health and reduce risk of disease.
- **Ask for support from friends and family** to help you stay on track – by not pestering you to eat foods you're trying to avoid, for example, or not eating those foods in front of you. A minority of respondents overall reported that a spouse or family

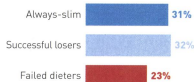
member interfered with their healthy eating efforts, but 31% of failed dieters reported some form of spousal sabotage in the month prior to the survey.

- **Get up and move** While regular, vigorous exercise correlated most strongly with healthy body weight, the findings suggest any physical activity is helpful, including activities you might not even consider exercise. Housework, gardening and playing with the kids were modestly tied to lower weight. Hours spent sitting each day – at an office desk or at home watching TV – correlated with higher weight. The Australian Bureau of Statistics' 2007-2008 National Health Survey found that 48% of people reportedly walked for exercise, 36% exercised at a moderate level and only 15% did vigorous exercise, so upping the ante in this area is likely to help. ■

## DIETARY STRATEGIES

**S**uccessful losers and the always-slim do a lot of the same things – and do them more frequently than failed dieters. For the dietary strategies below, numbers reflect those who said they ate that way at least five days a week, a key tipping point as determined by the analysis. (Differences of less than four percentage points are not statistically significant.)

### Strength train at least once a week



### Do vigorous exercise at least four days a week



### Eat fruit and vegetables at least five times a day



### Eat whole grains, not refined



### Eat less than 1/3 kilojoules from fat



### Observe portion control at every meal



### Count kilojoules





## DID YOU KNOW?

## Healthy eating on a budget

**H**ealthy foods such as fruits and vegetables can be more expensive (serving for serving) than potato chips and chocolate bars. But that doesn't mean you should resign yourself to getting fat if you're on a budget. Here are some tips from CHOICE and *Consumer Reports* on putting together healthy meals for less.

**Buy in season** This improves your chances of getting the freshest produce, and you avoid paying for shipping. For a list of seasonal fruits, see [www.choice.com.au/fruit-in-season](http://www.choice.com.au/fruit-in-season).

**Try supermarket generics** Quality doesn't always come at a price premium. Some supermarket brands – particularly home-brand staples such as sugar, salt and flour – are often just as good as pricier name brands. (We'll be reporting on the nutrition, cost and taste of supermarket brands compared with leading brands in the September and October issues of CHOICE.)

**Buy frozen produce** Frozen fruits and vegetables – often frozen soon after picking – can be more nutritious than “fresh” items from your local supermarket, which may have sat on store shelves for days. And by using the frozen variety, you don't have to worry about it spoiling before it's eaten – fruit and veggies make up the bulk of the \$5.2 billion worth of food wasted by Australians every year.

**Eat pulses** such as beans, chickpeas and lentils. They're inexpensive, versatile and a great source of protein and fibre. Add them to salads, soups, stews and pasta dishes to increase bulk. Canned pulses are the most convenient, but for maximum economy, buy dried.



**Make a big fruit salad** Squeeze lemon juice over it to stop it going brown, then divide it into individual food-storage containers for breakfast, dessert or a snack each day. Making your own costs much less than buying deli- or store-made fruit salad.

**Avoid packaged drinks** Dilute juice to cut down on kilojoules as well as cost. Don't buy bottled water – drink tap instead. Invest in a reusable polyethylene (opaque plastic) water bottle to store it.

**Buy in bulk** Buy extra chicken, meat or fish when they're on special and freeze what you don't eat straight away. Buy large packages of snacks and re-bag. Buy fruit and veg with a longer shelf life (such as apples, oranges, potatoes and onions) in the large pre-packaged bags rather than a few at a time – but use unit pricing to compare value, as buying in bulk isn't always the cheapest option.

**Buy a whole chicken** It's more economical than buying separate breasts, thighs and wings, and you can get a nutrient-packed stock out of it, too. Freeze the pieces you don't use in individual freezer bags.

**Put meat and poultry on the side** Keep meat and poultry to the recommended serving size of 65g-100g. Fill up your plate with whole grains and in-season or frozen vegetables.

**Use your scraps** Cook leftover meat and vegetables into a frittata, quiche or omelette; eggs are a great source of protein. Use bones, meat or vegetable scraps to make stock. Try our chicken stock recipe at [www.choice.com.au/chicken-stock-recipe](http://www.choice.com.au/chicken-stock-recipe).

#### Grow your own veggies

This requires a little time, but can have nice payoffs (including exercise). Find out how you can set up your own edible garden, with or without a backyard, at [www.choice.com.au/gardening](http://www.choice.com.au/gardening).

#### Know your supermarket

Products that make the largest profit margin are usually at eye level in supermarket aisles, so check higher and lower shelves for better bargains. For more tips, see Trolley Psychology, CHOICE April 2010 (page 60).

**Plan ahead** Avoid impulse buying – make a weekly menu and shopping list and get everything you need in one trip. Cook for the week; one-pot meals such as casseroles, pot-roasts, soups and stews use cheaper cuts of meat, and you can divide into portions and take to work for lunch or freeze the remainder for later. Slow cookers are great for one-pot meals; for our latest test results, go to [www.choice.com.au/slow-cookers](http://www.choice.com.au/slow-cookers).



## NUMBER CRUNCH

67%

of Australian men are overweight or obese (48% are overweight, 19% are obese).

52%

of Australian women are overweight or obese (30% are overweight, 22% are obese).



## NUTSHELL

>> It's not just sugary foods and drinks that are bad for your teeth; acidic foods and drinks – including sugar-free ones – can damage tooth enamel, eroding it and making teeth more susceptible to decay.

>> High-risk foods include some muesli bars and processed fruit snacks; high-risk beverages include soft drinks, fruit cordials and fruit drinks.

Until 1996, the health of Australian kids' teeth was improving, but since then tooth decay has been on the rise. On average, six-year-old children now have two decayed or filled baby teeth, while 15-year-olds have two decayed, missing or filled permanent teeth. Experts particularly blame our increasing consumption of sugary snacks and drinks, including fruit juices; on average, Australians drink about 113L of soft drink per year, an increase of 240% over 30 years. But there are many other foods and drinks that are potentially harmful for teeth.

In collaboration with the Australian Dental Association (Victorian Branch), CHOICE tested a broad range of 50 foods and 35 drinks, all popular brands and products readily available in most supermarkets (see tables, page 26). It comes as no surprise that lollies and fizzy drinks can be bad for teeth, but products such as some muesli bars and processed fruit snacks can also contribute to tooth erosion and decay. Unfortunately, many of these foods are promoted as "healthy" snacks for kids' lunch boxes.

## The riskiest foods and drinks

Scientific studies consistently point to sugars as the most important dietary factor in causing tooth decay. Less well known, however, is the fact that acidic foods and drinks, even sugar-free ones, can also damage teeth. Acid can directly damage the enamel surface of teeth – a process

## HOW WE TEST

Our tester blends each food with an equal weight of deionised water, then measures the pH and acid reserves [as the volume of base (0.1M sodium hydroxide) required to adjust the pH to 7.0]. Cordials are diluted with water following the instructions on the label, while other drinks are tested without adding water; for carbonated drinks, the pH is measured immediately after opening and again after the drink has gone flat. Values for sugar content are taken from the nutrition information on the label.

**STORY** DAVID OAKENFULL  
& NATHAN COCHRANE

# Eating away your teeth

Even sugar-free foods and drinks can damage your teeth. CHOICE testing reveals the worst offenders.

known as dental erosion (see How Tooth Decay and Erosion Occur, below right). A recent survey found 68% of Australian children aged between six and 15 had at least one tooth that showed signs of erosion. We compared the sugar content and acidity (see What is pH?, below) of 85 processed foods and drinks and categorised them as high, moderate or low risk – see How We Test, below.

- **High-risk** food or drinks contain a lot of sugar and also have high acidity (red squares in the tables, page 26).
- **Moderate-risk** products either contain a lot of sugar or have high acidity, but not both (amber triangles).
- **Low-risk** products contain less sugar and are not highly acidic (green circles).

## WHAT IS pH?

Familiar to swimming pool owners, pH is a scale of acidity and alkalinity. Strong acids have a pH of 0; strong bases 14. Foods or drinks with a pH below 5.5 can cause erosion of the dental enamel.

|         | pH | EXAMPLE       |
|---------|----|---------------|
| Acids   | 0  | Strong acid   |
|         | 1  | Stomach acid  |
|         | 2  | Lemon juice   |
|         | 3  | Vinegar       |
|         | 4  | Tomato juice  |
|         | 5  | Rainwater     |
|         | 6  | Milk          |
| Neutral | 7  | Pure water    |
|         | 8  | Egg whites    |
|         | 9  | Baking soda   |
|         | 10 | Tums® antacid |
| Bases   | 11 | Ammonia       |
|         | 12 | Soapy water   |
|         | 13 | Bleach        |
|         | 14 | Strong alkali |



pH 5.5  
(teeth can start to dissolve above this line)

## The worst offenders

**Foods** Not surprisingly, all confectionery products on test are in the high-risk category. Two brands, Wonka Fruit Tingles and Warheads Juniors Extreme Sour Hard Candy, stand out as the worst. They contain more than 80% sugar, and they're more acidic (with pH values of 2.35 and 2.06 respectively) than any other food or drink on test. They also have high acid reserves, making it harder for saliva to neutralise the acid, so the teeth are exposed for longer.

Of greater concern, though, is the fact that some of the muesli bars on test, as well as other products promoted for kids' lunch boxes such as processed fruit snacks, fall into the high-risk category. These foods are often sticky, which increases the time the teeth are exposed to sugar and acid. Uncle Tobys Fruit Fix and Robern Frubears also have high acid reserves, further increasing their potential to damage teeth.

**Drinks** Fizzy drinks feature prominently in the high-risk category. Market leader Coca-Cola packs 10 teaspoons of sugar into a 375mL can of Coke; it's also very acidic (pH 2.53) as it contains phosphoric acid. Pepsi contains even more sugar and is even more acidic (pH 2.45). Sugar-free "diet" alternatives such as Coke Zero and Pepsi Max can also damage teeth.

Caffeine-loaded V Energy drink stands out as having a higher acid reserve than most other soft drinks. Fruit

cordials such as Golden Circle Pineapple Crush, and fruit drinks such as Pop Tops Apple Blackcurrant Drink, can also be in the high-risk category. Fruit juices, often seen as healthy, can cause dental erosion due to their acidity. Studies show that fruit juices are the most resistant to saliva's buffering effect, followed by fruit-based carbonated drinks.

The Australian Beverages Council argues drinks leave the mouth quickly and are less likely to cause tooth decay than foods that stick to the teeth. However, they can still cause erosion. A study of children in the UK found dental erosion was associated with consumption of fizzy drinks (and to a lesser extent, fruit juices). >

## FRUIT FIX

**S**ome fruits themselves can be acidic enough to cause dental erosion. Lemons and other citrus are obvious examples, but white grapes and Red Delicious apples are also fairly acidic (pH 4.03 and 4.37 respectively). Less acidic fruits include bananas and melons. While fruit can be sweet, most of the sugar is fructose. The bacteria in our mouths find fructose harder to deal with than ordinary sugar [sucrose], so fruits are generally less harmful to teeth than processed foods with similar sugar content.

**A recent survey of Australian children aged 6-15 found 68% had at least one tooth showing signs of erosion**

## HOW TOOTH DECAY AND EROSION OCCUR

**T**ooths are made up of thousands of tiny crystals of calcium phosphate that are in a constant state of flux as calcium and phosphate ions move back and forth between the tooth enamel and saliva. Under acidic conditions (pH less than about 5.5), there is a net loss of calcium and phosphate ions from the tooth (a process known as demineralisation).

**Tooth decay** (dental caries) is caused by bacteria in plaque, which forms as a layer on the surfaces of teeth. These bacteria use sugar for energy, and produce acids as a by-product that can damage the crystals of the teeth. The more often you have sugary foods or drinks, the more acid the bacteria makes and the more damage that occurs.

If you only eat three meals a day, with no sugary snacks or drinks in between, the bacteria

have only three opportunities to produce acid, so there is minimal damage to your teeth. However, sugary drinks and snacks extend the time the bacteria are producing acid, increasing your risk of tooth decay. As damage accumulates, the tooth can become weak and break down, leading to a hole or cavity that may require a dental filling. If this process continues it can cause complete breakdown of the tooth, the only treatment option for which is extraction.

**Dental erosion** is caused by acids that come directly from foods or drinks (or from stomach acids regurgitating into the mouth). This acid attack is stronger than that produced by the bacteria in the tooth decay process, and leads to the complete dissolution of the outer crystals of the tooth. Every time

an acidic food or drink passes your teeth and drops the pH in the mouth below 5.5, there's a chance the outer crystals are dissolving and reducing the amount of tooth you have left.

Fortunately, your teeth are constantly bathed in saliva, which contains protective components such as calcium and phosphate ions that can help repair some of the damaged crystals. Saliva can also wash sugar and acid into the stomach and neutralise some of the acids. However, if sugary or acidic foods are consumed too often and too regularly, the damage they cause cannot be balanced by the repair properties of saliva and damage to the teeth will accumulate. Additionally, saliva also has difficulty neutralising the damaging acids of foods or drinks that are very acidic or have high acid reserves.

## Foods

| HIGHER SUGAR, HIGHER ACIDITY                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                     | HIGHER SUGAR, LOWER ACIDITY                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Allen's Snakes Alive</b><br><b>Capilano Pure Australian Honey</b><br><b>Chupa Chups</b><br><b>Goulburn Valley Fruit &amp; Cereal Bars Tropical Fruits</b><br><b>IXL Strawberry Jam</b><br><b>Kellogg's Nutri-Grain bars</b><br><b>Mentos Fruit 4-pack</b><br><b>Natural Confectionery Company Mixed Jellies</b><br><b>Roben Frubears Apple</b><br><b>SPC Fruit Sorbet Orange</b> | <b>SPC Get Real Combo Fruit Snacks</b><br><b>SPC Get Real Rude Raspberry Snacks</b><br><b>Sun Apricot Bar</b><br><b>Uncle Tobys Apricot muesli bars</b><br><b>Uncle Tobys Fruit Fix Apple, Strawberry &amp; Grape</b><br><b>Uncle Tobys Yoghurt Tops Raspberry</b><br><b>Warheads Juniors Extreme Sour Hard</b><br><b>Wonka Fruit Tingles 4 pack</b><br><b>X-treme Candy Straps Sour Strawberry</b> | <b>Arnott's Iced VoVo</b><br><b>Arnott's Raspberry Shortcake</b><br><b>Arnott's Tiny Teddies Honey</b><br><b>Arnott's Tim Tam Originals</b><br><b>Carmen's Muesli Bites Apricot</b><br><b>Go Natural Berry Pieces in Yoghurt</b><br><b>Kellogg's Coco Pops</b><br><b>Kellogg's Froot Loops</b><br><b>Kellogg's K-time Twists</b> | <b>Kellogg's LCMs Kaleidos</b><br><b>Kellogg's Nutri-Grain</b><br><b>Nestlé Milo Cereal</b><br><b>Nutella</b><br><b>Paradise Strawberry Mallovs</b><br><b>Sun Sesame Bar</b><br><b>Uncle Tobys Crunchy Apricot muesli bars</b><br><b>Uncle Tobys Vita Brits High Fibre Bites Honey</b> |
| LOWER SUGAR, HIGHER ACIDITY                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                     | LOWER SUGAR, LOWER ACIDITY                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                        |
| <b>Ajitas Vege Chips Malt Vinegar</b><br><b>Arnott's Snack Right Fruit Pillow Apple &amp; Sultana</b><br><b>Go-Gurt Strawberry Yoghurt</b><br><b>Heinz Fruit Wobblers Pears in Raspberry Flavoured Jelly</b>                                                                                                                                                                        | <b>Jols Pastilles Forest Berries Sugar Free</b><br><b>Nestlé Diet Yoghurt No Fat Mixed Berry</b><br><b>Nestlé Finding Nemo Yoghurt</b><br><b>Sunnyboy Glug Cola</b><br><b>Uncle Tobys Roll-Ups Apple Berry Flavour</b>                                                                                                                                                                              | <b>Sanitarium Weetbix Kids</b><br><b>Smiths Crisps Original</b><br><b>Smiths Crisps Salt &amp; Vinegar</b><br><b>The Wiggles ABC Letter Biscuits Honey with Yoghurt</b><br><b>Vegetite</b>                                                                                                                                       |                                                                                                                                                                                                                                                                                        |

**USING THE TABLES** Foods (above) with higher acidity have pH values of less than 5 (after blending with an equal volume of water); drinks (below) with higher acidity have pH values of less than 4. Foods with higher sugars contain 15% sugars or more; drinks with higher sugars contain 7.5% sugars or more. These are the criteria that switch on red lights (for a lot of sugar) under the traffic light labelling system.

## Drinks

| HIGHER SUGAR, HIGHER ACIDITY                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                         | HIGHER SUGAR, LOWER ACIDITY                                                                                                                  |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Berri Orange Juice No Added Sugar</b><br><b>Coke</b><br><b>Fanta Orange</b><br><b>Fuze Tropical Punch</b><br><b>Golden Circle Apple Juice No Added Sugar</b><br><b>Golden Circle LOL Go Mango</b><br><b>Golden Circle Orange Juice</b><br><b>Golden Circle Pineapple Crush</b> | <b>Golden Circle Sunshine Punch</b><br><b>Just Juice Apple Blackcurrant</b><br><b>LA Ice Cola</b><br><b>Pepsi</b><br><b>Pop Tops Apple Blackcurrant Drink</b><br><b>Red Bull Energy Drink</b><br><b>Sprite</b><br><b>V Energy Drink</b> | <b>Berri Low Acid Orange Juice</b><br><b>Berri Orange Juice Classic</b><br><b>Sanitarium Up &amp; Go Liquid Breakfast Banana &amp; Honey</b> |  |
| LOWER SUGAR, HIGHER ACIDITY                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                         | LOWER SUGAR, LOWER ACIDITY                                                                                                                   |  |
| <b>Coke Zero</b><br><b>Cottlee's Diet Cordial Lemon Crush No Added Sugar</b><br><b>Cottlee's Lemon Crush Fruit Juice Cordial</b><br><b>Diet Coke</b><br><b>Gatorade Fierce Grape</b><br><b>Glacéau VitaminWater Triple-X</b>                                                      | <b>Pepsi Max</b><br><b>Powerade Isotonic Lemon Lime</b><br><b>Powerade No Sugar</b><br><b>Red Bull Energy Drink Sugar Free</b><br><b>Sprite Zero</b><br><b>Staminade Lemon Lime Fusion</b><br><b>V Energy Sugar Free</b>                | <b>Milk</b><br><b>Sanitarium Up &amp; Go Vibe Low Sugar</b><br><b>Water</b>                                                                  |  |

### DID YOU KNOW?

## 7 ways to prevent tooth decay and erosion

If you have a sensible diet, a good flow of saliva, a regular teeth and gums cleaning routine and your teeth get appropriate exposure to fluoride, you're less likely to suffer decay or erosion. So to prevent damage to your teeth:

- **Brush twice a day and floss once a day**  
But don't brush your teeth immediately after acidic foods or drinks, as you can wear away the softened enamel before saliva has had a chance to re-harden it.

- **Limit (don't snack on) sugary foods and drinks**, as these allow bacteria in the plaque to produce the acids that dissolve teeth. Particularly avoid sticky snacks such as some muesli bars that hold the sugar in your mouth for longer.
- **Limit highly acidic foods and drinks**  
Using a straw can reduce the contact of an acidic drink with your teeth.
- **Restrict high-risk foods and drinks to a once-a-week treat** They will do less

damage if you have them at mealtimes and if rapidly cleared from the mouth by rinsing with water or following them with a protective food such as an unsweetened dairy product or sugar-free chewing gum.

- **Use fluoride toothpaste**, as exposure to fluoride can help control the development of decay.
- **Drink fluoridated water** to stay hydrated instead of sugary or acidic soft drinks.
- **Have regular dental check-ups.**

## NUTSHELL

>> CHOICE bought one pair of standard single-vision spectacles from Big W Vision, Budget Eyewear, OPSM, Optical Superstore and Specsavers, and found price differences of up to 100%.

>> Cheap offers are often too good to be true, as they only apply to single-vision glasses for low- or medium-strength prescriptions and don't include recommended extras.

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# THE MIN D GO GGLES

A price war has broken out in the optical industry. CHOICE's shadow shop will help you assess your next pair of specs – and save plenty.

STORY UTA MIHM

**A**bout one in two Australians wears spectacles and almost everyone will need glasses at some point in their life. Aggressive price advertising is a sign of the times in the optical industry. Spectacles discount chain Specsavers arrived in Australia in 2008 and now has 225 stores. The UK retailer is competing with market leader, Luxottica, an Italian company that owns OPSM, Laubman & Pank and Budget

Eyewear. So it's not surprising that cheap specs are being advertised by all retailers.

But are these offers too good to be true? CHOICE's shadow shop found that although you can save up to 100% when you buy single-vision lenses with metal frames, advertised offers do not include recommended extras. We tested the spectacles for quality (see How We Test, page 30) and found Budget Eyewear and OPSM came out on top; for more, see Profiles, page 28.

## How our shadow shop worked

An experienced female shadow shopper first visited the School of Optometry at the University of NSW in Sydney for a prescription, and purchased one pair of single-vision spectacles with standard plastic lenses and anti-scratch coating, and unisex metal frames with flex hinges.

Using the same prescription, she then visited Big W Vision, Budget Eyewear, OPSM, Optical Superstore and Specsavers and purchased similar specs, with prices ranging from \$125 to \$250. We added the cost for anti-reflective coating for price comparison in the profiles, as this was recommended by all the retailers. Next, she visited five smaller independent specs retailers in and around a suburban shopping centre in Sydney, and got quotes ranging from \$159 to \$250.

Our shadow shopper told us she found trying to understand the different lens coatings on offer confusing, as store assistants' explanations of "anti-reflective", "anti-scratch" and "multi-coat" varied considerably.

## Choosing your lenses and coatings

For single-vision lenses, standard plastic is the most common option (see What Are the Different Types of Lenses?, page 30). For progressive (multi-focal) lenses, which correct near- and farsightedness at the same time, lens technology has advanced and more options are available, ranging from \$70 up to \$400 on top of the price for single-vision lenses and frames. >

## CASE STUDY

### Premium lenses with a cheaper frame

**A**bout five years ago, CHOICE publisher Anny Friis bought a pair of expensive titanium multi-focal spectacles. When she noticed a change in her vision, Anny paid a visit to her local optometrist for an eye test and was told her vision had deteriorated.

For her new spectacles, Anny

opted for relatively cheap stainless steel frames, but went for the most expensive lenses she could afford as the optometrist explained they would be much better for her driving vision.

"The lenses have advanced from what I got five years ago, and now I don't have to turn my head

when driving," says Anny. "I have excellent peripheral vision."

She also noticed she was able to adapt to the new spectacles within 24 hours, much quicker than the previous time.





We found only small price differences between the big optical stores and smaller independent retailers

## PROFILES

### PASSED ALL TESTS



#### Budget Eyewear

- R&B
- \$250 (\$200 without anti-reflective coating)



#### OPSM

- Ray-Ban
- \$348 (\$249 without anti-reflective coating)

### MINOR PROBLEMS



#### Optical Superstore

- Country Road
- \$175 (\$125 without anti-reflective coating)
- Borderline pass result for optical tolerance, but of acceptable quality.



#### Specsavers

- Specsavers Marvin
- \$199.25 (\$149.25 without anti-reflective coating)
- Borderline pass result for optical tolerance, but of acceptable quality.



#### Big W Vision

- Emporio Armani
- \$218 (\$158 without anti-reflective coating)
- One lens failed the minimum lens thickness test, but we rate it as being of acceptable quality as it passed the impact resistance test.

### SPECTACLES RETAILERS COMPARED

### EXTRA COST ADDED TO SINGLE VISION LENS & FRAME DEAL

| Retailer (sorted by price paid in our shadow shop) | Cheapest offer – single-vision spectacles, scratch-resistant coating (\$) | Shadow shop price – single-vision spectacles, scratch-resistant coating (\$) | Extra cost for anti-reflective coating (\$) | Extra cost for 1.67 high-index plastic lenses (\$) | Extra cost for 1.74 high-index plastic lenses (\$) | Extra cost for progressive (multi-vision) lenses (\$ range) |
|----------------------------------------------------|---------------------------------------------------------------------------|------------------------------------------------------------------------------|---------------------------------------------|----------------------------------------------------|----------------------------------------------------|-------------------------------------------------------------|
| Optical Superstore                                 | 45                                                                        | 125                                                                          | 50                                          | 130                                                | 270                                                | 70-170                                                      |
| Specsavers                                         | 59                                                                        | 149                                                                          | 50                                          | 180                                                | 280                                                | 150-300                                                     |
| Big W Vision                                       | 56                                                                        | 158                                                                          | 60                                          | 180                                                | 280                                                | 100-200                                                     |
| Budget Eyewear                                     | 50                                                                        | 200                                                                          | 50                                          | 200                                                | 200                                                | 155-300                                                     |
| OPSM                                               | 59                                                                        | 249                                                                          | 99                                          | 217                                                | 250                                                | 156-400                                                     |

< Compared with cheaper, older-style progressive lenses, so-called "tailor-made" progressive lenses – the most expensive – allow more natural vision up close and greater accuracy and sharpness, with a wider mid-range field of vision. Your eyes may also adapt faster to tailor-made lenses (see Premium Lenses With A Cheaper Frame, page 27).

After deciding on the type of lens you want, choose the coating:

**Anti-scratch** (known as "hard" or "super-hard coating") is usually standard. It reduces scratching, although no lenses are entirely scratch-proof.

**Anti-reflective** (known as "ultraclear") reduces reflection, increasing light passing through and making your eyes more visible and appealing. It also helps night and computer vision by reducing reflections from overhead, street and car lights. The major stores don't normally include this in offers and charge between \$50 and \$99 extra.

**UV eye protection** is usually included in a "multi-coat" coating. High-index, progressive and polycarbonate lenses are already UV-resistant. UV protection cannot guard against all harm from sunlight, so always use prescription sunglasses or clip-ons outdoors.

### Choosing your frames

Plastic frames, while fashionable, are less durable than metal and can fade. However, metal frames can cause allergic reactions and may be heavier than plastic. Stainless steel is most widely used, both for its hypoallergenic qualities and because it's comparatively cheap. The most expensive frames available are titanium, which are lightweight, durable and hypoallergenic, but harder to adjust and repair. >

### SPOT THE DIFFERENCE?

The Ray-Ban specs (top, \$348) from OPSM cost almost twice as much as the Country Road pair (bottom, \$175) from Optical Superstore. They're both of acceptable quality and, as you can see, look very similar.



### FRAME FIT

For optimal fit, the frames should:

- >> Be no higher than your eyebrows.
- >> Not sit on your cheeks, otherwise they can rub or irritate.
- >> Be no wider than the overall width of your face at the temples.

| progressive lenses                                                 | Most popular designer – female | Most popular designer – male | Warranty (months) | Number of stores | Frames per store (approximate) | Phone        | Contact                  |
|--------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|------------------|--------------------------------|--------------|--------------------------|
| Carl Zeiss Vision Synchrony (\$120)                                | Country Road                   | Tommy Hilfiger               | 12                | 64               | > 1200                         | 1300 477 327 | opticalsuperstore.com.au |
| Pentax Novus 1.5 (\$250)                                           | Karen Millen                   | FCUK                         | 24                | 225              | > 1200                         | 1300 241 773 | specsavers.com.au        |
| Hamir Autograph, free-form<br>tailor-made, high-definition (\$180) | Guess                          | Tommy Hilfiger               | 12                | 28               | 650                            | 1800 251 311 | bigwvision.com.au        |
| Anorama Plus (\$215)                                               | Vogue                          | Ray-Ban                      | 12                | 93               | > 400                          | 1300 303 606 | budgeteyewear.com.au     |
| Anorama Plus (\$231)                                               | Prada                          | Ray-Ban                      | 12-24             | 310              | > 400                          | 13 20 20     | opsm.com.au              |

## DID YOU KNOW?

### What are the different types of lenses?

**Standard plastic lenses** (CR39, 1.5 index lenses) are the cheapest lenses and used in advertised offers – usually with an anti-scratch coating included. Made from lightweight plastic, which has good optical qualities, they're suitable for single-vision, small- or medium-strength prescriptions. However, without a coating they're prone to scratches and usually not suitable for larger refractive errors.

**Polycarbonate lenses** are impact-resistant and used for safety eyewear, kids and sports glasses. The material is identical to "bulletproof" glass, but their visual quality is not as good as other lenses due to "chromatic aberration" (a rainbow effect) in peripheral vision.

**High-index lenses** are made from special plastic that uses less material to correct a prescription, so they're thinner, lighter and suitable for strong prescriptions.

They offer greater impact resistance and UV protection, and are the first choice for rimless or semi-rimless frames to avoid chipping. The higher the index number, the thinner, lighter and more expensive they are. Index lenses range from 1.6-1.74, with the extra cost for 1.74 index lenses ranging from \$200 to \$280 in major stores.

**Aspheric lenses** are thinner and flatter, which reduces the "large eye" look if you're far-sighted, or "small eye" if you're near-sighted.

**Multi-focal (progressive) lenses** correct both near- and long-distance vision, usually in the 40+ age group. In the five stores CHOICE shadow-shopped, prices you'll pay for the most popular progressive lenses range from \$70 up to \$400, in addition to the price of single-vision spectacles. The most expensive progressive lenses are referred to as "tailor-made" or "free-form", "high-definition" or "latest technology lenses".

< Designer frames dominate stores. Manufacturers license a brand such as Prada, Versace or Dolce & Gabbana, and these licensing fees mean higher prices. Paying a premium for a designer brand, however, does not guarantee superior quality – Luxottica manufactures many designer frames and applies many of the same quality tests to its no-name products, which means you can get a great-looking pair of glasses without blowing the budget. We found price differences of \$100 for the same pair of Prada frames, so shop around and look for cheap online offers.

## CHOICE VERDICT

Our shadow shop found price differences of up to 100% for very similar spectacles. Beware: some advertised prices are too good to be true as they don't include recommended extras. As there were only small differences in the range of prices between the big chains and smaller independent retailers, it's a good idea to check prices from your neighbourhood optical store, where you may be offered a more personalised service.

In our test, two stores – Budget Eyewear and OPSM – came out on top. The spectacles from both these stores passed all the tests. The other three stores had one small problem each; two had small problems in the correction of our shadow shopper's refractive error (see How We Test, below). Large variations may cause blurriness and headaches, so get your eyes checked regularly to keep your prescription current.

If you have difficulty adapting to new spectacles, take them back to the retailer to make sure there is no fault in the lens. ■

## HOW WE TEST

Testing was undertaken by the Optics and Radiometry Laboratory of the University of NSW. The spectacles from Budget Eyewear and OPSM passed all our tests, but Big W Vision, Optical Superstore and Specsavers showed one small problem each.

**Optical tolerance test** Are the lenses made according to the prescription? One lens each from Optical Superstore and Specsavers only rated a borderline pass for this test. To correct the refractive error for our shadow shopper, the left lens should have had a refractive power of -1.50D on one of the meridians, but the left lenses of the Optical Superstore and Specsavers pairs had refractive powers of -1.58D and -1.57D respectively. A variation

of up to -1.59D is allowed to pass the test, however the instrument used in testing has an uncertainty of measurement of  $\pm 0.03D$ . If 0.03 is added to the results, the lenses fail the test; if deducted, they are well within tolerance.

If the refractive power is wrong, this can cause blurriness, headaches or difficulty adapting to the new spectacles. In the case of the two lenses above, the variation is likely to be too small to cause problems, so we rated these lenses as being of acceptable quality.

**Thickness of the lens** This test is for impact resistance and security within the frame (if thickness is low, the lens may be less secure in the frame).

Lenses must have a minimum thickness of 2mm. The Big W Vision left lens was only 1.8mm, but the lens passed the impact resistance test so we rate it as being of acceptable quality.

All the specs passed the following tests without any further problems:

- Material and surface quality of lens (including the lens thickness test).
- Bridge strength – a 250g weight determines the resistance of the bridge to bending.
- Corrosion resistance – salt spray is applied and frames are checked for discolouration.
- Low-impact resistance – a 42g weight is dropped on the lens from 1.8m.



STORY TANYA FONG

## Bed for your buck

We survey 3500 CHOICE members to find out which mattress will give you the best night's sleep.

### NUTSHELL

>> Find out the exact specifications of the mattress before buying.  
>> The mattress industry is flush with inflated prices because it's a discount industry, so always haggle for a lower price, even when they're already "on sale".

**Y**ou've asked CHOICE many times to test mattresses, but experts tell us that bed comfort is all about personal preference, so shopping around is vital. Unfortunately, you're thwarted from the start by so many retailers selling so many brands, mattress types and models – which are often the same brand under a different name. Furthermore, the bed industry is driven by discounts and conspires against meaningful price comparisons. Our member survey highlights the best brands and retailers for your next mattress (see How We Survey, page 32). CHOICE's US and UK sister publications, *Consumer Reports* and *Which?*, also ran brand mattress satisfaction surveys, with very similar top results to ours – Tempur took out the number one slot in all three countries.

### Our member survey results

**Mattress brands** Tempur, a memory-foam mattress, topped our survey with an 88% overall satisfaction score. It also rated highest for the brand of mattress our members would "definitely buy again" (see table, page 32). Memory foam, also known as visco-elastic polyurethane foam, was first developed in the 1970s by the US National Aeronautics and Space Administration (NASA) in space shuttle seats to relieve the G-force pressure astronauts experienced during take-off. The material was commercialised by Tempur, which markets its products for their pressure-relieving qualities. CHOICE members did report some drawbacks with Tempur; according to Michael, "the mattress hardens up in winter and gets very uncomfortable". Some also noted that Tempur is a comparatively expensive brand.

CHOICE members most commonly bought the Sealy brand of mattress, but its satisfaction score was lower than the less commonly bought Madison mattress (a brand only available at retail chain Snooze). "The \$3000 Sealy mattress I bought is uncomfortably hot at night," says Heather. "We've had to sleep with the air-conditioning on all night, yet I still toss and turn a lot." Other members voiced >

### BUYING A NEW MATTRESS

- **Ask for specifications** such as what fibres are used and what type of springs the mattress has (and how many), as well as the density of the memory foam, foam or latex. Ask how the mattress is "layered"; if this is a mystery to the sales staff, don't buy from that retailer.
- **Ask to be shown a cross-section** of the mattress.
- **Find a manufacturer that is also a retailer** You'll see the materials they use, products are generally cheaper and they can custom-make a mattress to suit your needs.
- **Test the mattress** in the store with your partner and preferred pillows for at least 30 minutes.
- **Test the same brands and models in other stores** Mattresses may have been well tested by previous bed shoppers and the same mattress may feel different at another retailer.
- **Look for natural fibre coverings** such as cotton and bamboo, which allow skin to breathe.
- **Be aware that mattresses with pillow tops retain more heat** and can't be turned regularly for impact distribution.
- **Beware "osteopathic" or "chiropractic" advertising hype** Such claims mean little unless they're from an accredited source.
- **Ask the retailer about its returns policy**, including transport to the store and re-delivery charges.
- **Check the warranty**, as most do not cover comfort. Some warranties cover different parts of the mattress, or are based on a pro-rata basis. Tempur, for example, provides a full guarantee of its mattresses for the first five years, but the guarantee depreciates by 10% annually from the sixth to the 15th year.

# MATTRESS BRAND SATISFACTION

| Brand (number of respondents) | Overall satisfaction (%) | Would definitely buy again (%) | Main reason for purchasing brand | New mattress improved sleep (%) | Average price (\$) ^ |
|-------------------------------|--------------------------|--------------------------------|----------------------------------|---------------------------------|----------------------|
| Tempur (88)                   | 88                       | 64                             | Comfort                          | 88                              | 3300                 |
| Sleepyhead (35)               | 83                       | 36                             | Comfort                          | *                               | 2180                 |
| Sultan (47)                   | 80                       | 48                             | Price                            | 77                              | 650                  |
| Makin (81)                    | 79                       | 47                             | Comfort                          | 83                              | 1770                 |
| Madison (30)                  | 77                       | 37                             | Comfort                          | 87                              | 2420                 |
| Simmons (99)                  | 76                       | 42                             | Comfort                          | 80                              | 2160                 |
| Dunlop (39)                   | 75                       | 33                             | Comfort                          | 67                              | 2010                 |
| Sealy (599)                   | 74                       | 39                             | Comfort                          | 68                              | 2000                 |
| Slumberland (43)              | 74                       | 26                             | Comfort                          | 84                              | 1950                 |
| A.H. Beard (296)              | 74                       | 40                             | Comfort                          | 72                              | 1910                 |
| Sleep City (46)               | 73                       | 29                             | Comfort                          | 78                              | 1260                 |
| Dunlopillo (55)               | 71                       | 28                             | Comfort                          | 73                              | 2710                 |
| Sleepmaker (293)              | 70                       | 26                             | Comfort                          | 65                              | 1830                 |
| Crown (35)                    | 69                       | 28                             | Comfort                          | *                               | 1650                 |

TABLE NOTES \* Sample size less than 30. ^ Average price is calculated by taking the mid-point of the brand's price range. Prices rounded to the nearest \$10.

# MATTRESS RETAILER SATISFACTION

| Retailer* (number of respondents) | Overall satisfaction (%)** | Customer service (%) | Product range (%) | Cost (%) | Number of times discount received (%) |
|-----------------------------------|----------------------------|----------------------|-------------------|----------|---------------------------------------|
| Makin (66)                        | 80                         | 83                   | 78                | 79       | 6                                     |
| Ikea (53)                         | 80                         | 70                   | 83                | 88       | 6                                     |
| Sleepy's (81)                     | 80                         | 86                   | 77                | 77       | 69                                    |
| David Jones (173)                 | 80                         | 82                   | 77                | 80       | 87                                    |
| Forty Winks (299)                 | 78                         | 78                   | 79                | 76       | 66                                    |
| Sleep City (103)                  | 77                         | 77                   | 76                | 78       | 52                                    |
| Domayne (98)                      | 76                         | 76                   | 79                | 74       | 68                                    |
| Bedshed (108)                     | 76                         | 78                   | 76                | 75       | 50                                    |
| Myer (140)                        | 76                         | 77                   | 73                | 78       | 84                                    |
| Beds R Us (61)                    | 75                         | 79                   | 72                | 75       | 48                                    |
| Snooze (224)                      | 75                         | 77                   | 77                | 70       | 52                                    |
| Harvey Norman (347)               | 75                         | 73                   | 76                | 73       | 64                                    |
| Super AMart (36)                  | 73                         | 71                   | 71                | 76       | 36                                    |

TABLE NOTES \* Physical stores only. Online stores excluded due to insufficient sample size.

\*\* Overall score is an average of customer service, product range and cost scores.

< similar negative sentiments about both Sealy mattresses and the brand's customer service (see Sagging Service from Sealy, below right), though only 5.4% said they definitely would not buy a Sealy mattress again.

Sleepmaker was close to the bottom of the list for overall satisfaction. Says CHOICE member Rachel: "Both the retailer and Sleepmaker refused to replace or fix our sagging mattress. We will never buy a Sleepmaker again."

Comfort is the number one priority for members buying a mattress – except for Ikea's Sultan brand, where price is the key factor. On average, a Sultan mattress costs about one-fifth the price of a Tempur, yet still rates third-highest for overall satisfaction. According to CHOICE member Graham, Sultan offers "a great product for the price, with a three-month exchange option and 25-year guarantee".

**Mattress retailers** About 61% of CHOICE members bought on discount from all retailers surveyed (see table, below left). Makin, a manufacturer with retail warehouses in Adelaide, Albury, Brisbane, the Gold Coast, Canberra and Newcastle, came out tops for overall satisfaction, along with Ikea, bedding franchise Sleepy's (which has the highest score for customer service satisfaction) and David Jones.

Members raved about Sleepy's 60-night comfort exchange guarantee, which allows customers dissatisfied with the comfort or feel of their mattress to exchange it within 60 days for another of equal or greater value. ■

# HOW WE SURVEY

**Mattress brands** 3500 CHOICE members who bought a mattress in the last five years:

- Rated how satisfied they were with their mattress
- Told us the main reason they purchased a brand (price, comfort, durability, recommended by someone else)
- Identified whether they purchased an inner spring, foam or latex mattress, and how much they paid
- Advised if they would buy the same brand again
- Identified whether the mattress had improved their sleep.

**Mattress retailers** More than 2500 CHOICE members who bought a mattress in the last three years:

- Rated their retailer on cost, product range and customer service
- Specified if they tried out their mattress before buying, and for how long
- Advised whether they received a discount from their retailer
- Told us whether they returned their mattresses to the retailer – and, if so, their reasons for doing so and any problems they experienced.



## YOUR MATTRESS QUESTIONS ANSWERED

**Q: What's inside a mattress?**

**A:** A mattress is formed of many layers. On top can be polyester, cotton, viscose or bamboo fabric, covering a foam or latex layer. A pillow top is foam or latex. At the core is memory foam, foam, latex or springs. Materials react differently to body impact and heat, and the ability of the mattress to "breathe" depends on density and layering.

**Q: Why are so many discounted?**

**A:** Retailers mark up mattresses so they can heavily discount them, and most consumers now only buy on sale. The "sale price" is usually the true retail price; however, mattresses discounted at more than 50% may have been repaired or returned.

**Q: Why do mattresses feel hot?**

**A:** The density of materials compressed under your weight restricts airflow, which means the

material under your body absorbs and retains your heat. Ask how big the open cells in a latex mattress are; the bigger the cells, the less heat is absorbed. Lack of airflow means a latex mattress will at first feel stiff and cold in winter, but becomes more malleable as it warms up from your body heat. Foam allows more airflow, but is the least resilient of mattress materials and loses shape quickly.

**Q: Why do ridges form?**

**A:** Ridges and body indentations are normal on almost every mattress, but you're not usually told this at the point of sale. Foam, memory foam or latex pillow tops are more susceptible to higher ridges. Body indentations up to 32mm are normal, but deeper dents formed during warranty may indicate a mattress defect.

**Q: Do more dollars always mean a better quality mattress?**

**A:** According to industry experts, fewer materials are used in cheaper mattresses. Also, a mattress with Bonnell springs (an older spring system) is cheaper than one with multiple pocket springs. Ask what and how much material is in the mattress. Ultimately your comfort is the key factor.

**Q: Should I return a faulty mattress to the retailer or the manufacturer?**

**A:** You should first contact your retailer. The contract of sale entitles you to insist the retailer provides you with a refund, replacement or repair, even if it's a manufacturing fault. If your retailer is unable to assess the damage, it should arrange delivery of the item to the manufacturer. You can also approach a manufacturer for replacement or repair, but not refunds, because your contract is with the retailer (unless of course the manufacturer is also the retailer).

## NUMBER CRUNCH

**10%**

of CHOICE members who took part in our survey tried returning their mattress because of dissatisfaction;

**36%**

of those members found difficulties doing so.

**41%**

of all survey respondents replaced their mattress every six to 10 years.

## CASE STUDY

## Sagging service from Sealy

In September 2006, CHOICE members Owen and Tricia Gerke bought a Sealy mattress to replace their original 20-year-old Sealy. By January 2007, the mattress was sagging with body indentations and a ridge had formed in the middle. Sealy customer service told them the sagging was "normal".

After two inspections and some repairs, the Gerkes are still dissatisfied. Sealy insists this is a "comfort choice issue" rather than a manufacturing defect and will not replace their mattress, offering only to repair it if it sags by 32mm. "The mattress had sagged by 20mm in just two months and is very uncomfortable," says Owen.

"This is unacceptable. We want a replacement because it was unfit for its purpose from the start."

Sealy spokesman, Matthew Thomas, tells CHOICE the body indentations on the Gerkes' mattress are normal, as Sealy mattresses are designed to conform to body contours. "The most significant amount of height loss occurs in the first six months of use due to compression and adjustment in the comfort layers," he argues. "When you sit in a padded lounge chair you leave an impression, and over time the seat may not be as high as when you bought it. It does not mean the chair will be uncomfortable."

Sealy has arranged to inspect Owen's mattress and has indicated a replacement may be in order.

Last year, CHOICE member Richard Levine called Sealy several times asking them to inspect his mattress, which was giving him and his wife back pains. Body impressions – about 2.5cm deep – had also formed on the foam pillow-top spring mattress.

Upon inspection, Sealy concluded that Richard's pre-existing, non-Sealy spring base was the problem. In the end, David Jones, the retailer from which he bought the mattress, eventually refunded his money.

**CHOICE ONLINE**

Go to [www.choice.com.au/mattresses](http://www.choice.com.au/mattresses) to read members' experiences with their mattresses and to share yours.



STORY ALAN DOOLEY

# In search of independence

Long-overdue industry reforms will reduce the risk of bad or biased recommendations – but even when they're in place, choosing a financial adviser will still be a challenge.

place a "fiduciary responsibility" on advisers and get rid of many conflicts of interest. The changes, effective from July 2012, will do much to protect consumers. In the meantime, however – and even after the reforms – consumers seeking good, trustworthy advice still need their wits about them.

## Types of advisers

An adviser's ownership, level of independence and how they're paid may influence their advice.

**Institutionally owned** An estimated 85% of advisers are attached or affiliated to banks, fund managers, super funds and other financial institutions, which causes biases. Research by Roy Morgan found that in 2009, the six largest planning groups placed an average 73% of their clients' superannuation money into products offered by their institutional parent.

## NUTSHELL

>> The ownership of and commissions received by financial advisers influence their recommendations and the quality of their advice.

>> Even if you get independent advice and pay a fee-for-service, conducting your own due diligence remains paramount.

**C**HOICE has spent more than 20 years investigating and warning about structural conflicts of interest in the financial advice industry, which at times have led to dangerous advice and contributed to enormous investor losses.

At the heart of the problem is the way most advisers are paid – namely, commissions from the "manufacturers" of financial products, such as banks, fund managers and super funds. This creates conflicts of interest that taint advisers' independence and motivate some to recommend products and strategies that aren't in their clients' best interests.

Following a Parliamentary Joint Inquiry (to which we provided evidence and a submission) in April this year, Chris Bowen, the Minister for Financial Services, Superannuation and Corporate Law, published the *Future of Financial Advice*, a comprehensive reform package to

## CASE STUDY

### \$12,000 fee for advice

**D**enise and Stewart Thorburn were talked into having a fresh look at their finances by an adviser. They were charged \$1250 up front. "We were advised to borrow against our house to invest elsewhere, to switch super funds, and to take out extra life insurance to cover new debt," Denise says. "They ran through it as if it were a win-win situation and expected us to sign on the spot."

The couple didn't sign as they felt uncomfortable with the recommendations. The adviser and

licence-holder would have taken a large cut of their money – not only the \$1250 up-front fee, but a further \$6600 from the loan for "initial advice", \$3800 in initial insurance commissions, \$500 per year in insurance trail commissions and \$2200 annually in superannuation investment commissions. All up, the strategy's fees were almost \$12,000 up-front and \$2700 annually. Denise's super fees would have doubled if she'd switched, as recommended, from her industry fund, REST Super.

"All I wanted was advice on how to minimise our tax, pay off the mortgage and boost our super. We also wanted some advice on a property investment, but were advised to invest in a managed fund with lots of adviser commissions. Our bank felt it was risky and that the expected returns were a bit inflated, so we didn't follow through. I wish I hadn't been pushed into the appointment, as that \$1250 could've been spent on my mortgage."



Confusion abounds over the ownership of planning groups and influence on advice. This is particularly common around third-party brands; Hillross Financial Planning, for example, is owned by AMP, yet 50% of its super customers surveyed believe Hillross is independent.

**Independently owned** These advisers may claim some degree of independence because they're not owned by banks or other product manufacturers. This, combined with a fee-for-service approach, means many are less likely to be swayed to recommend particular investments and companies. However, where these advisers collect commissions of any kind, they cannot claim to provide independent advice.

**Independent advisers** Legally, financial advisers can only use terms such as "independent", "impartial" and "unbiased" to describe their services if they're free from any conflicts of interest caused by links to product manufacturers, and if they refuse (or immediately rebate to customers) commissions and other payments and gifts from the financial institutions whose products they recommend. In general, impartial advisers are much more likely to charge a fee for their services, and to recommend low-cost investment products that don't pay commissions, including industry super funds, exchange traded funds and listed investment companies.

The list of genuinely independent advisers is small; 10 are named at [www.independent-advice.com.au](http://www.independent-advice.com.au), a website that gives details for some (not all) independents.

## How will you pay?

Commissions are the dominant remuneration for financial advisers. This means you pay higher fees for financial products, yet still receive advice that could be conflicted. Product providers such as managed funds pay commissions when an adviser recommends them – an initial entry fee of up to 5% of your initial and subsequent investments, and a trail commission of about 0.5% of the balance of your portfolio each year. Commissions are much higher on life, income protection and disability insurance – Denise's adviser (see case study, left) would have received a payment worth 100% of her first year's premiums and 14% of annual premiums after that if she'd followed his advice.

A second form of payment, similar to trail commissions and agreed between investors and advisers, is a percentage "asset-based" fee. It's charged as a proportion of your investments or portfolio.

A straight fee-for-advice – a set or hourly fee for the work involved, as you'd pay a doctor or lawyer – generates the fewest conflicts of interest. There is an increasing number of fee-based advisers, and groups including the Financial Planning Association, AMP and MLC are moving to this model ahead of the July 2012 regulatory deadline.

## ASSESSING YOUR ADVISER

- **Licence** Check your adviser's authorisation to provide financial product advice at [www.asic.gov.au](http://www.asic.gov.au).
- **Read the financial services guide (FSG)** to find key details such as ownership and independence. Licensed advisers must provide an FSG before you start dealing with them.
- **Ask about your adviser's qualifications, training and experience.**
- **Membership of professional association** Are they a member of the Association of Financial Advisers or Financial Planning Association?
- **Check what research is used by the adviser** to create their lists of recommended investments.
- **Study the product disclosure statement(s) (PDS)** for any recommended products.
- **Get a written statement of advice** and clarify any parts you don't understand.
- **Get a second opinion** if you're in any doubt about the advice you receive.
- **Check complaints** You'll soon be able to check complaints about advisers and companies at [www.fos.org.au](http://www.fos.org.au).
- **Due diligence** Educate yourself about the advice provided and the strategies and products recommended, and ensure you're fully satisfied that they're right for you.



For an expanded guide to getting independent advice and more on the reforms, as well as the history and impacts of CHOICE campaigning in this area, go to [www.choice.com.au/financialadvice](http://www.choice.com.au/financialadvice)

## The cost of comprehensive advice

A full financial plan usually costs \$3000-\$4000, with smaller ongoing review fees applying in subsequent years. Some advisers provide more basic services for a smaller fee, and free limited advice and information is sometimes available from super funds.

Many consumers pay considerably more than \$4000 through higher fees for commission-based products. Rice Warner research on behalf of Industry Super Network (ISN) found fees are cheaper than commissions in the long run. "Not only does financial advice cost less when clients pay a fee-for-service, but the products recommended also cost less, resulting in greater net value of advice," says ISN. "Financial advisers remunerated by commissions charge between two and 13 times more than financial advisers remunerated on a fee-for-service basis."

Even with fee-based advice, there are traps to watch for. Some advisers may like to appear independent by charging fees, while continuing to rake in product commissions as well. If you pay by the hour, advisers may have an incentive to work slowly. And as explained earlier, corporate ownership has an impact, too – in the advice industry, it seems he who pays the piper often calls the tune. ■

STORY STEVE DUNCOMBE

# Should you buy an iPad?

The answer to this question depends on how you work and what your specific needs are.

For creating content, Apple has Pages (word processor), Numbers (spreadsheet) and Keynote (presentations) apps to suit the iPad, which can be purchased separately.

## Choose your network

There are six models of the iPad to choose from: three that only use Wi-Fi (wireless local area networking) and three that can also use 3G mobile phone networks. Wi-Fi model pricing starts at \$629 for 16 gigabytes (GB) of storage space, then \$759 for 32GB and \$879 for 64GB. The Wi-Fi + 3G models are priced at \$799, \$928 and \$1049 for the 16GB, 32GB and 64GB models respectively.

The 3G iPads require a 3G mobile data plan, using the new tiny Micro-Sim card. You can't simply swap in the standard-sized sim card used in most mobile phones, including the iPhone. Major telcos have announced prepaid monthly data plans specifically for this format.

## CHOICE VERDICT

The iPad is designed to work in conjunction with a PC or Mac, synchronising any content you want to take with you on the go. It currently has no direct competition, although others are in the works. Provided you can find the apps you need, the iPad may be the ideal unit for taking your electronic content on the road. ■

## JARGON BUSTER

**APPS** Specific-purpose programs for the iPad, iPhone and iPod Touch, available through the Apple App Store or iTunes.

**EBOOK** Electronic book – the digital equivalent of a printed book.

**NETBOOK** A small, low-power, cheap laptop computer for internet use on the go.

**TABLET PC** A Windows laptop computer with touchscreen or stylus navigation.

**PDA (Personal Digital Assistant)** A handheld computer for managing contacts, appointments and tasks.



## NUTSHELL

>> The iPad has the functionality of an eBook reader, netbook, tablet PC, media player and PDA, but can't be classified as any of these devices.

>> It won't replace your existing PC or Mac, but it is useful for taking your computer content on the road.

**W**hen launched in January by Apple, the iPad was hailed as "revolutionary" and even "magical". But despite the hyperbole, the iPad is not necessarily for everybody.

The iPad is not a laptop computer in the conventional sense. In fact, it doesn't really fit into any standard device category. It's not a netbook, nor is it a tablet PC, media player or PDA (see Jargon Buster, below). Yet it can perform many of the functions of these devices – either straight out of the box or with the addition of the relevant apps.

What the iPad does provide is a compact, go-anywhere computer and eBook reader with touch navigation for ease of use and all-day battery life. Smaller than an A4 sheet of paper and weighing about 700g (depending on the model), the 9.7-inch colour screen responds to various one- or two-finger strokes to select, scroll, enlarge, reduce and navigate the 200,000+ apps already available for the iPhone and iPod Touch, as well as more than 5000 apps specifically developed for the iPad's larger screen.

The iPad comes with apps for Calendar, Contacts, Notes, Maps, YouTube, iTunes, Mail, Photos and iPod, as well as a new Videos app. It's an eBook reader, web browser, media player, entertainment console, PDA and even a digital picture frame.

The iPad will not run your normal PC or Mac programs such as Microsoft Office. It also won't run Flash animations, leaving "holes" in many web pages that use this popular multimedia format.

## Driven by content

As a portable media player, web browser and games console the iPad excels, with adequate sound via the built-in speaker or through headphones. Turn it sideways and the screen automatically rotates to suit; otherwise, you can lock it in place with a switch – ideal for reading an eBook while lying down.

eBooks are available through the new Apple iBookstore, which joins Apple's other online stores for music, video, audiobooks and apps. You can also download the Kindle app to access the Amazon bookstore, as well as other popular eBook apps such as Stanza.

# Lab tests

Home entertainment, whitegoods, household and personal appliances – they're all tested here.

BREAD-  
MAKERS  
PAGE 41



CHOICE Home Economist, Fiona Mair, testing breadmakers in our kitchen lab.

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## CHOICE. Make the right one.

**CHOICE** has its own testing laboratories, where experienced technical staff put products through their paces. We use test methods from Australian standards, and we develop our own to match the way consumers use a product in their homes. We buy the products we test, to maintain our independence from manufacturers and so we know what you're faced with in the shops. Our recommendations are based on a product's quality and performance, with no hidden bias.

**CHOICE SHOPPER** For the best deal on products where you see this logo, call 1300 360 655. Have the model name and number, the price you've been quoted and your CHOICE personal subscriber number.

**CHOICE ONLINE / CHOICE VIDEO** When you see one of these headings, there is more information about this story at [www.choice.com.au](http://www.choice.com.au).

**CHOICE BEST BUY** Our testers award a product a Best Buy if it delivers high quality at a comparatively low price. Not every product test report includes Best Buys.



**CHOICE GREEN BUY** Our researchers award a Green Buy to a product that delivers good quality and environmental performance at a comparatively low price. Not every test report has Green Buys.







#### NUTSHELL

>> Freshness is essential to the quality of extra virgin olive oils, so local oils have the edge over imported as they're able to reach your supermarket shelf faster.  
>> Half the oils on test don't meet international standards for "extra virgin".

#### STAY TUNED

We'll be reporting on the performance of all cooking oils, including tips on using olive oil, in the September issue of *CHOICE*.

STORY RACHEL CLEMONS

## Not-so-virgin territory

Can you be sure your extra virgin olive oil is of the highest grade, unadulterated and unrefined?

**E**xtra virgin olive oil should be a culinary delight, but if the quality is poor it may leave a nasty taste in your mouth. You can pay as much as \$26 a litre for extra virgin olive oil in supermarkets, but price doesn't always indicate quality; one of our What to Buy recommendations (see opposite) costs less than \$12 per litre.

There's currently no mandatory standard for extra virgin olive oil sold in Australia, so you have to trust that an oil labelled "extra virgin" is mechanically extracted from top-quality olives, isn't adulterated or refined, and is stored and handled correctly so that it remains of the highest grade at the point of purchase. *CHOICE* testing of 28 brands of extra virgin olive oil, however, found this isn't always the case.

#### Local oils in your supermarket

Nine of the top 10 brands in our taste test (see How We Test, opposite) are Australian and are silver or bronze medal class according to the Australian Olive Association's (AOA) sensory scoring system. Five of these are produced by companies signed up to the AOA's voluntary code of practice,

which guarantees the authenticity and quality of certified products. To be certified, products must be Australian and meet internationally accepted specifications as determined by organoleptic (sensory) and chemical testing.

The bad news for supermarket shoppers is that half the oils on test – most of which are imported from Italy and Spain – don't meet the widely accepted International Olive Council (IOC) trade standard for "extra virgin" (see Jargon Buster and table, page 40). The tests we used are designed to check for signs of fruit damage, poor harvesting operations, poor storage of fruit or oil before processing or bottling, refinement (such as bleaching or deodorising) or deterioration due to ageing or poor storage of the bottled oil.

A number of the producers of oils that failed presented us with evidence that the particular batch of oil we tested met extra virgin requirements at the time of bottling, but our test results found they weren't extra virgin at the point of purchase. This suggests that ageing or less-than-ideal storage conditions and handling after bottling are often to blame. Extra virgin olive oil deteriorates with time and exposure to excess heat, oxygen and light.

FoodWorks and Aldi are taking steps to rectify problems along the supply chain, while Ollo and Red Island have strengthened internal production processes to avoid quality issues. But distributors and producers of other oils that failed our tests have not indicated they will take any action.

#### Our results aren't isolated

In 2009, the Australian Competition and Consumer Commission (ACCC) identified three imported olive oils labelled "extra virgin" – Paese Mio Organic, Aigeon and IGA's Isabella brand – that failed to meet the IOC standard. This led to court-enforceable undertakings that, for three years, the companies involved would undertake more testing to demonstrate their products' compliance with IOC standards before hitting supermarket shelves.

Earlier that year, IOC-accredited Modern Olives Laboratory Services in Victoria reported more than half of all

#### DID YOU KNOW?

### The good oil

Olive oil is rich in "better for you" monounsaturated fats and contains a wide variety of valuable antioxidants. Some of the health benefits of extra virgin olive oil include reduced risk of cardiovascular disease, lower blood pressure, lower levels of bad cholesterol and protection against various forms of cancer. It's a healthier substitute for saturated fats such as butter or palm oil, although it still contains the same amount of kilojoules as any other fat.

## WHAT TO BUY

These oils are the top scorers in our show judging taste test, which puts them in silver medal class. They meet all requirements for "extra virgin" according to the International Olive Council standard.



**Coles**  
Australian  
Extra Virgin  
Olive Oil  
\$5.89 (500mL)

BEST  
BUY



**Cobram Estate**  
Extra Virgin  
Olive Oil Fresh  
& Fruity  
\$10.99 (750mL)



**Woolworths**  
Select Australian  
Extra Virgin  
Olive Oil  
\$6.99 (500mL)

NUMBER  
CRUNCH

**40%**

of olive oil retail sales in Australia is for extra virgin olive oil.

**95%**

of olive oil produced in Australia is extra virgin.

extra virgin olive oils in the Australian market don't belong to this category. While less than 25% of the 52 Australian oils it tested weren't extra virgin, more than 80% of the 51 imported oils tested failed to meet extra virgin requirements as a result of being poor quality, too old and/or refined.

## Best consumed young

An oil's aromas and flavours are at their peak when it's young. According to the AOA, most extra virgin olive oils retain freshness for at least 12 months if stored properly in sealed bottles in a cool, dark place. Unlike wine, olive oil does not improve with age – so the closer to its production you use it, the better.

Unfortunately, current labelling requirements don't help you choose the freshest oils. The IOC suggests a best-before date indicating the "minimum durability" of the oil, although how the date is calculated is at the discretion

of the producer or importer. The AOA recommends a scientific approach to measuring shelf life and determining a best-before date that's specific to an individual oil. Date of bottling, harvest or production would be more helpful for consumers, but not necessarily feasible or useful according to industry, as oil may be a blend from different years and held in a tank for an extended time before bottling. Most brands give only a general best-before date, if at all.

## CHOICE VERDICT

Whether issues with olive oil quality occur during production, transportation, storage or at the retail level, the fact remains that consumers aren't always getting true extra virgin quality at the point of sale, despite paying a premium.

The AOA recently signed an agreement with Standards Australia to produce a standard for Olive Oil Trade covering all olive oils sold in Australia, which should be >

## HOW WE TEST

We test supermarket olive oils, all labelled "extra virgin". We exclude flavoured oils and only include the most popular oil of each brand, according to its manufacturer/distributor.

**Quality tests** A single bottle of each oil is tested against the International Olive Council trade standard for olive oil, which defines "extra virgin" and sets criteria for purity and quality.

Oils must meet both chemical and organoleptic (sensory) requirements in order to comply. The standard isn't mandatory in Australia, but is one of the most widely recognised and accepted international guides to the essential elements of genuine extra virgin olive oil. Both chemical and organoleptic tests were conducted by the NSW Government Department of Industry

& Investment's IOC-accredited Olive Oil Testing Service at Wagga Wagga, NSW.

**Show judging taste test** Our expert tasters, all members of the IOC-accredited sensory panel, taste the same batch of each oil (without knowing brands) and agree on a score, following the Australian Olive Association's 20-point sensory scoring system.

CHOICE  
ONLINE

For each oil's show-judging taster comments and what they mean, log on to [www.choice.com.au/oliveoil](http://www.choice.com.au/oliveoil)

< implemented in the next six to 12 months. While this is a step in the right direction, CHOICE wants "extra virgin" to be regulated under the Food Standards Code, with mandatory requirements that all olive oils labelled "extra virgin" meet basic purity and quality standards for the duration of their expected shelf life, as well as carry a suitable date so that consumers are able to choose the freshest oils. ■

## JARGON BUSTER

**"Virgin"** oil is extracted from olives by a mechanical process without excessive heat, additives or solvents.

**"Extra virgin"** oil, in addition to the above, has low acidity (0.8% or less) and should comply with other technical specifications, as well as being free from taste defects.

**"Light", "lite" or "pure"** olive oils have been refined through a combination of physical (heat) and chemical processes, resulting in an oil with no distinctive aroma, colour or taste. A small percentage of virgin oil is then mixed with this oil to give it flavour. Refining removes antioxidants, so these oils aren't as healthy as extra virgin. They don't have less fat or fewer kilojoules than regular oils.

**"Early harvest"** oils tend to be "robust" (bitter and pungent), with greener characters (such as grassy, green-apple aromas).

**"Late harvest"** oils tend towards "mild and mellow", with sweeter characters (such as ripe banana or vanilla aromas).

**"Cold pressed"** and **"first press"** are outdated and unhelpful marketing terms. All virgin oils have to be "cold extracted" – extracted from the olive without the use of excessive heat (manufacturers can extract more oil from olives with heat, but the quality suffers). Traditional hydraulic presses have been almost entirely replaced by centrifuges, and all virgin oil comes from a single extraction – there's no second press.

**Olive varieties** include Arbequina, Barnea, Coratina, Corregiola, Frantoio, Kalamata, Koroneiki, Leccino, Manzanillo, Pendolino and Picual. Trained tasters can identify a variety by its trademark characteristics; oil from Picual olives (originally from Spain), for example, has peppery, bitter and slightly woody flavours. About 90% of Australian olive oil is produced from 10 of these major varieties.

| PRODUCT                                                   | PERFORMANCE        |                                       |                                        | SPECIFICATIONS    |                         |                      |
|-----------------------------------------------------------|--------------------|---------------------------------------|----------------------------------------|-------------------|-------------------------|----------------------|
| Brand / oil (in order of score; alphabetical where equal) | Show judging score | Meets IOC "extra virgin" requirements | Australian Olive Association certified | Country of origin | Bottle size tested (mL) | Price per litre (\$) |
| Coles Australian Extra Virgin Olive Oil                   | 15.5               | ✓                                     |                                        | Australia         | 500                     | 11.78                |
| Cobram Estate Extra Virgin Olive Oil Fresh & Fruity       | 15                 | ✓                                     | ✓                                      | Australia         | 750                     | 14.65                |
| Woolworths Select Australian Extra Virgin Olive Oil       | 15                 | ✓                                     |                                        | Australia         | 500                     | 13.98                |
| Maggie Beer Extra Virgin Olive Oil                        | 14.5               | ✓                                     |                                        | Australia         | 375                     | 26.08                |
| Olive Grove Extra Virgin Olive Oil                        | 14.5               | ✓                                     | ✓                                      | Australia         | 500                     | 18.30                |
| IGA Signature Extra Virgin Olive Oil                      | 14                 | ✓                                     |                                        | Australia         | 750                     | 14.01                |
| Red Island Extra Virgin Olive Oil                         | 14                 |                                       | ✓                                      | Australia         | 500                     | 16.98                |
| Viva Extra Virgin Olive Oil Late Harvest                  | 14                 | ✓                                     | ✓                                      | Australia         | 375                     | 14.64                |
| Woolworths Home Brand Extra Virgin Olive Oil              | 14                 |                                       |                                        | Spain (A)         | 500                     | 9.78                 |
| Jingilli Devine Extra Virgin Olive Oil                    | 13                 | ✓                                     | ✓                                      | Australia         | 500                     | 15.98                |
| Minos Krete's Best Extra Virgin Olive Oil                 | 12                 | ✓                                     |                                        | Greece            | 500                     | 15.90                |
| Pietro Coricelli Extra Virgin Olive Oil                   | 12                 | ✓                                     |                                        | Italy             | 500                     | 14.80                |
| Best Buy Extra Virgin Olive Oil (FoodWorks)               | 11                 |                                       |                                        | Australia         | 500                     | 12.58                |
| Carbonell Extra Virgin Olive Oil                          | 11                 |                                       |                                        | Spain             | 500                     | 12.98                |
| Moro Extra Virgin Olive Oil                               | 11                 | ✓                                     |                                        | Spain             | 500                     | 12.58                |
| Ionis Extra Virgin Olive Oil                              | 10.5               | ✓                                     |                                        | Greece            | 500                     | 16.98                |
| Casa Barelli Extra Virgin Olive Oil (Aldi)                | 10                 |                                       |                                        | Italy             | 750                     | 8.39                 |
| Minerva Extra Virgin Olive Oil                            | 10                 | ✓                                     |                                        | Greece            | 750                     | 7.32                 |
| Lupi Extra Virgin Olive Oil Fruity Taste                  | 9.5                |                                       |                                        | Italy (B)         | 500                     | 13.40                |
| The Olive Tree Extra Virgin Olive Oil Fruity (Aldi)       | 9                  |                                       | ✓                                      | Australia         | 500                     | 11.98                |
| La Espanola Extra Virgin Olive Oil                        | 8.5                |                                       |                                        | Spain             | 500                     | 12.60                |
| Always Fresh Spanish Extra Virgin Olive Oil               | 8                  |                                       |                                        | Spain             | 500                     | 16.12                |
| Borges Organic Farming Extra Virgin Olive Oil             | 8                  | ✓                                     |                                        | Spain             | 500                     | 14.98                |
| Olio Extra Virgin Olive Oil Fresh & Fruity                | 8                  |                                       | ✓                                      | Australia         | 500                     | 15.98                |
| Vetta Extra Virgin Olive Oil                              | 8                  |                                       |                                        | Spain             | 500                     | 15.74                |
| Bertolli Extra Virgin Olive Oil Fruity Taste              | 7                  |                                       |                                        | Italy (B)         | 500                     | 13.98                |
| BioNature Organic Extra Virgin Olive Oil                  | 7                  |                                       |                                        | Italy             | 500                     | 15.98                |
| Colavita Extra Virgin Olive Oil                           | 6.5                |                                       |                                        | Italy             | 500                     | 17.98                |

**USING THE TABLE SCORE** Tasters use the Australian Olive Association's 20-point sensory scoring system, under which a bronze medal score is 13-14.5, a silver medal is 15-16.5, and gold 17 or higher. "Extra virgin" Quality test results for oils without a tick in this column fall outside IOC limits for extra virgin classification. Note: these results are specific to the single batch of oil tested – see How We Test, page 39. Prices are per litre for comparison, based on what we paid in Sydney supermarkets in February 2010 for the specified bottle size. **TABLE NOTES (A)** Packed in Spain from imported and local olive oils. **(B)** Bottled and blended in Italy from local and imported olive oils.

STORY MARTHA PSIROUKIS

# Well bread

Wake up to fresh and tasty bread in your kitchen every morning with one of these breadmakers.

## NUTSHELL

>> On test: 10 breadmakers ranging from \$100-\$290.  
>> There are three good reasons to bake your own bread: freshness, health benefits, and because it's cheaper.

**B**aking bread at home is increasingly popular, and it's not surprising; there's nothing quite like the smell, taste and texture of a freshly baked loaf. It's also reassuring to know exactly what ingredients go into the bread you eat, particularly if you're avoiding or reducing certain ingredients such as gluten or salt, the latter of which is often unnecessarily high in many supermarket breads (see Slice of Life, CHOICE May 2010, page 28).

When it comes to cost, the prices of some supermarket breads have increased by up to 30% in less than four years. Baking your own loaf from scratch costs about 43c/100g, compared with 87c/100g for a loaf of Helga's Seed Sensations Rich Wholegrain – the top scorer in our multigrain bread test. So if you use your breadmaker

regularly, you can recoup the initial purchase price reasonably quickly. When buying ingredients in bulk and baking from scratch three times per week rather than buying Helga's, for example, you can recoup the costs in almost six months. The average electricity cost to run these breadmakers three times per week is only about \$10 per year at 17 cents per kWh. >

## WHAT TO BUY

|                                          |       |
|------------------------------------------|-------|
| <b>Panasonic</b> SD-257                  | \$269 |
| <b>Breville</b> ikon Baker's Oven BBM600 | \$290 |
| <b>Sunbeam</b> Quantum SmartBake BM7800  | \$219 |
| <b>Sunbeam</b> Bakehouse BM3500S         | \$159 |

## WHAT TO LOOK FOR

**Loaf size and shape** Do you prefer a vertical or horizontal loaf? Vertical loaves can be trickier to slice as the crust around the sides is softer. The number of slices varies, but generally you can expect eight slices from a 500g loaf, 12 from a 750g loaf and 16 from a 1kg loaf.

**Loaf colour options / crust control** This feature allows you to select your desired crust colour; most breadmakers have a choice of light, medium or dark. Some functions are pre-programmed with a crust colour; "sweet", for example, would be limited to a light-medium setting as the increased sugar content can produce a dark crust.

**Delay start** Most breadmakers come with at least an eight-hour delay start feature. This is great if you want your bread to be finished when you wake up or get home from work, but is only suitable for basic breads that don't contain perishable ingredients such as eggs or cheese.

**Automatic fruit and nut dispenser** This automatically adds ingredients such as fruit, nuts and herbs for you at the right time. All models beep when it's time to add them.

**Progress indicator** shows the stage of the bread-making process in the electronic display window.

**Viewing window** enables you to see the bread as it bakes, reducing the temptation to open the lid, which can cause heat loss and produce a poor loaf. The window will fog up during some of the processes. All models on test except the Panasonic have a viewing window.

**Removable lid** makes cleaning the machine easier.

**Power failure protection** This is a memory device that saves your bread if the power is

interrupted, such as the plug accidentally being removed or a black-out. All models except the Sunbeam Bakehouse Compact have this feature. Some machines give you just a few minutes to restore power, while others give up to one hour, after which the cycle continues where it left off. If the power goes off during the baking cycle, it's best to continue baking in the oven.

**User-programmable settings** allow the user to program their own personal recipe cycle times and baking temperature. This feature is only available on the Breville ikon and the Sunbeam Quantum.

**Manual stop/pause function** allows you to be more creative with bread-making. The pause button can be activated at any time for up to 10 minutes before the program continues. Activating the pause at the second rise, for example, allows you to remove the dough and form it into a braid, pull-apart or filled bread, then place it back into the breadmaker. Only the Breville ikon and the Sunbeam Quantum have this feature.





## CHOICE ONLINE

Baking the perfect loaf at home involves trial and error, but perseverance pays off. To get started on the right foot, read our testers' bread-making tips at [www.choice.com.au/breadmaking](http://www.choice.com.au/breadmaking).

## WHAT TO BUY

### 83% Panasonic SD-257

#### PRICE \$269 (HORIZONTAL LOAF) GOOD POINTS

- Excellent for making multigrain bread from scratch.
- Good result using a pre-mix.
- Easiest bread tin to insert and remove.
- Easy to remove loaf.
- Touch controls are easy to use, and control labels feature both text and images.
- Comparatively very quiet – the best option for using overnight.
- Extra settings include pizza dough, Italian, sandwich and rye.

#### BAD POINTS

- Longest program time.
- Comparatively large and bulky.
- No cord storage or viewing window.
- Relatively expensive.



### 76% Breville ikon Baker's Oven BBM600

#### PRICE \$290 (HORIZONTAL LOAF) GOOD POINTS

- Very good results for making bread from scratch and from pre-mix.
- Large touch controls with good colour contrast are easy to use.
- Easy to remove loaf.
- Cord storage.
- Pause function and manual mode for personal recipes.
- Extra settings include wholemeal rapid, yeast-free, jam, pasta and pizza dough.
- Internal light for clearer viewing.

#### BAD POINTS

- Can be a little difficult to insert and remove the bread tin.
- Paddle is difficult to remove from the tin.
- Stainless steel exterior needs more effort to keep clean.
- Comparatively large, bulky and expensive.



## ABOUT THE REST

The bread tin of the **Breville Baker's Oven BBM300** is fiddly to insert and remove, as is the paddle. It's particularly noisy when mixing and kneading, so you wouldn't want it working overnight.

The **Cuisinart's** bread tin locks in easily with a twist and it has easy-to-use controls, but its program time is comparatively long.

The bread tin of the **Breville Baker's Oven BBM100** is easy to

insert and lock into place, but requires some effort to remove. Its controls are simple and easy to use.

The **Sunbeam Bakehouse Compact BM2100** and **Tefal's** bread tins are easy to insert and lock into place, but

| PRODUCT                           | PERFORMANCE       |                                             |                                             |                       |                                              | FEATURES                                |                     |            |                      |             |
|-----------------------------------|-------------------|---------------------------------------------|---------------------------------------------|-----------------------|----------------------------------------------|-----------------------------------------|---------------------|------------|----------------------|-------------|
| Brand / model (in rank order)     | Overall score (%) | Multigrain loaf made from scratch score (%) | Multigrain loaf made from pre-mix score (%) | Ease of use score (%) | Time taken from scratch / pre-mix (hrs:mins) | Energy use from scratch / pre-mix (kWh) | Loaf size options   | Loaf shape | Crust colour options | Delay start |
| Panasonic SD-257                  | 83                | 95                                          | 75                                          | 77                    | 5:00 / 5:00                                  | 0.373 / 0.488                           | Med; large; x-large | Horizontal | ✓                    | ✓           |
| Breville ikon Baker's Oven BBM600 | 76                | 80                                          | 80                                          | 67                    | 3:32 / 3:30                                  | 0.318 / 0.404                           | 1.25kg; 1kg; 750g   | Horizontal | ✓                    | ✓           |
| Sunbeam Quantum SmartBake BM7800  | 76                | 85                                          | 70                                          | 73                    | 3:55 / 3:50                                  | 0.307 / 0.330                           | 1.25kg; 1kg; 750g   | Horizontal | ✓                    | ✓           |
| Sunbeam Bakehouse BM3500S         | 75                | 80                                          | 75                                          | 70                    | 3:44 / 3:50                                  | 0.362 / 0.404                           | 1kg; 750g           | Vertical   | ✓                    | ✓           |
| Breville Baker's Oven BBM300      | 70                | 90                                          | 55                                          | 63                    | 3:08 / 3:33                                  | 0.275 / 0.290                           | 1kg; 750g           | Vertical   | ✓                    | ✓           |
| Cuisinart CBK100A                 | 69                | 70                                          | 70                                          | 67                    | 4:38 / 4:38                                  | 0.286 / 0.286                           | 900g; 680g; 450g    | Horizontal | ✓                    | ✓           |
| Breville Baker's Oven BBM100      | 67                | 85                                          | 45                                          | 73                    | 3:40 / 3:50                                  | 0.360 / 0.324                           | 1kg; 750g           | Horizontal | ✓                    | ✓           |
| Sunbeam Bakehouse Compact BM2100  | 66                | 75                                          | 60                                          | 63                    | 3:50 / 3:50                                  | 0.286 / 0.286                           | 750g                | Square     | ✓                    | ✓           |
| Tefal Home Bread OW300170 IP      | 64                | 65                                          | 65                                          | 60                    | 3:30 / 3:45                                  | 0.266 / 0.294                           | 1kg; 750g           | Horizontal | ✓                    | ✓           |
| Kenwood BM256                     | 52                | 50                                          | 50                                          | 57                    | 3:45 / 3:48                                  | 0.317 / 0.314                           | 1kg; 750g; 500g     | Horizontal | ✓                    | ✓           |

**USING THE TABLE** All breadmakers on test have power failure protection and programs for basic white bread, whole wheat and French bread. **Scores** The overall score is made up of: Multigrain loaf made from scratch: 35%; Multigrain loaf made from pre-mix: 35%; Ease of use: 30%. **Features** See What to Look For, page 41. **Price** Recommended retail, as of May 2010. \* We generally got poorer results



## 76% Sunbeam Quantum SmartBake BM7800

PRICE \$219  
(HORIZONTAL LOAF)  
GOOD POINTS

- Very good for making multigrain bread from scratch.
- Good result using a pre-mix.
- Bread tin is easy to insert.
- Easy to remove loaf.
- Colour-coded touch controls.
- Cord storage.
- Extra settings include yeast-free, jam, cake, damper, pasta and pizza dough.

### BAD POINTS

- Small viewing window can fog up during some processes.
- Comparatively large and bulky.



## 75% Sunbeam Bakehouse BM3500S

PRICE \$159  
(VERTICAL LOAF)  
GOOD POINTS

- Very good for making multigrain bread from scratch.
- Good result when using a pre-mix.
- Bread tin is easy to insert.
- Easy to remove loaf.
- Basic controls are easy to use.
- Extra settings include wholemeal rapid, jam, pasta dough, damper and cake.
- Compact and easy to store.

### BAD POINTS

- Blade is not removable.
- No progress indicator or fruit and nut dispenser.
- Small viewing window can fog up during some processes.
- Makes a vertical loaf, which may be more difficult to slice.



BEST  
BUY

## DID YOU KNOW?

You should avoid getting the outside of the pan wet, as this will cause rust to form and the shafts to seize up, rendering the pan unusable.

take some effort to remove. They have basic controls that are only OK to use. The Sunbeam has no timer display and only one loaf size setting.

The Kenwood's bread tin is easy to insert and lock into place, but needs

strength to remove. Controls are labelled with confusing symbols and no text. The advance button is the largest on the panel and segregated – which is where you'd expect the on/off switch to be.

### SPECIFICATIONS

| fruit and nut dispenser | Progress indicator | Removable lid | Viewing window | User-programmable settings | Exterior dimensions (cm, W x D x H) | Bread tin dimensions (cm, W x D x H) | Contact               | Price (\$) |
|-------------------------|--------------------|---------------|----------------|----------------------------|-------------------------------------|--------------------------------------|-----------------------|------------|
| ✓                       | ✓                  | ✓             | ✓              | ✓                          | 28 x 34 x 37                        | 18 x 14 x 15                         | panasonic.com.au      | 269        |
| ✓                       | ✓                  | ✓             | ✓              | ✓                          | 41 x 25 x 33                        | 20 x 14 x 14                         | breville.com.au       | 290        |
| ✓                       | ✓                  | ✓             | ✓              | ✓                          | 42 x 38 x 32                        | 20 x 14 x 15                         | sunbeam.com.au        | 219        |
| ✓                       | ✓                  | ✓             | ✓              | ✓                          | 25 x 34 x 32                        | 14 x 13 x 16                         | sunbeam.com.au        | 159        |
| ✓                       | ✓                  | ✓             | ✓              | ✓                          | 23 x 36 x 33                        | 13 x 13 x 17                         | breville.com.au       | 200        |
| ✓                       | ✓                  | ✓             | ✓              | ✓                          | 37 x 24 x 32                        | 18 x 14 x 14                         | cuisinart.com.au      | 229        |
| ✓                       | ✓                  | ✓             | ✓              | ✓                          | 27 x 37 x 29                        | 18 x 14 x 13                         | breville.com.au       | 130        |
| ✓                       | ✓                  | ✓             | ✓              | ✓                          | 24 x 33 x 30                        | 14 x 13 x 14                         | sunbeam.com.au        | 100        |
| ✓                       | ✓                  | ✓             | ✓              | ✓                          | 29 x 36 x 29                        | 18 x 14 x 13                         | tefal.com.au          | 180        |
| ✓                       | ✓                  | ✓             | ✓              | ✓                          | 34 x 26 x 31                        | 18 x 14 x 13                         | kenwood-australia.com | 199        |

from the Laucke pre-mix than baking from scratch; Laucke says that if your pre-mix loaf rises too much, try reducing the yeast quantity to one teaspoon.

### HOW WE TEST

#### Making bread from scratch/pre-mix

CHOICE's Home Economist, Fiona Mair, makes a 750g loaf of wholemeal multigrain bread from scratch using the manufacturers' instructions and recipes, and compares performance when making a 1kg wholemeal multigrain loaf from a Laucke pre-mix.

Fiona and our resident bread expert, David Oakenfull, visually assess the loaves for even crust colour, shape, uniformity of mixing, grain distribution, crust and crumb texture, looking for small and evenly distributed bubbles.

**Ease of use** Fiona notes how easy the bread tins are to remove and replace, how easy it is to remove the loaf, the intuitiveness of the controls, labels and features, and how easy the machines are to clean.

choice  
shopper

For the best deal, call CHOICE Shopper, 1300 360 655, with the model name and number, the price you want to beat and your CHOICE personal subscriber number. The full range of models on test may not be available in all states.



STORY STEVE DUNCOMBE

# Something for everyone

CHOICE tests 10 all-rounder laptops designed to suit every member of your family.

## NUTSHELL

>> All-rounder laptops should cope easily with most computing jobs and tasks; some on test offer unprecedented performance and value. >> For the full story on these computers, see *CHOICE* Computer, May/June 2010; to subscribe, call 1800 069 552 (toll-free) or visit [www.choice.com.au/magazines](http://www.choice.com.au/magazines)

The combination of Windows 7, Intel's latest Core i3 and i5 processors and more RAM (memory) fitted as standard means you can now buy more computer for your money than ever before.

One of the keys to increased performance is 64-bit computing, which doesn't have the performance bottleneck of a 32-bit operating system (the OS most older Windows computers use). A computer with 64-bit Windows can be more responsive when running lots of programs at the same time; some 64-bit programs can also run faster than 32-bit versions. However, to take advantage of 64-bit Windows, you must have a 64-bit processor, such as Intel's Core 2 Duo and the new Core i3, i5 and i7 range (see the table, below, for processor type).

Of the family all-rounders on test, four combine Intel's speedy Core i5 processor, a 64-bit version of Windows 7 and 4GB of RAM. One of these, the ASUS, costs less than \$1000 and is our Best Buy. Most of the laptops on test give you the option of installing either a 32-bit or 64-bit version of Windows 7. ■

## WHAT TO LOOK FOR

**Connections** Look for at least two USB ports, plus video-out options such as VGA, DVI or HDMI (for connection to large monitors, TVs or projectors) and a multi-card memory slot for SD, MMS and card formats. Ethernet networking is usually standard. Some models also have a high-speed eSATA port for connecting external hard drives – much faster than the USB 2.0 standard.

**Optical drive** A built-in optical drive (DVD burner) is standard for most laptops.

**Wi-Fi** Look for the latest 802.11n wireless local area networking standard rather than the slower 802.11g.

**Screen quality** Glossy screens give a brighter, more vivid picture, but matt screens are less reflective. We found no real difference in picture quality between these models.

**Security software** All Windows PCs should come with a suite of security software, preferably with a full one-year licence rather than a limited time trial version.

| PRODUCT                         | PERFORMANCE       |                       |                        |                       | FEATURES               |                    |                             | SPECIFICATIONS |      |       |     |                                |                            |
|---------------------------------|-------------------|-----------------------|------------------------|-----------------------|------------------------|--------------------|-----------------------------|----------------|------|-------|-----|--------------------------------|----------------------------|
| Brand / model (in rank order)   | Overall score (%) | Performance score (%) | Battery life score (%) | Ease of use score (%) | Recovery disc supplied | Recovery partition | 32/64-bit OS install option | USB ports      | HDMI | eSATA | VGA | Weight (kg, including battery) | Dimensions (cm, H x D x W) |
| Toshiba Satellite L550          | 78                | 92                    | 64                     | 66                    |                        | ✓                  | ✓                           | 3              | 1    | 1     | 1   | 3.1                            | 3.9 x 27 x 42              |
| ASUS K52F                       | 76                | 82                    | 70                     | 71                    | ✓                      | ✓                  | ✓                           | 3              | 1    |       | 1   | 2.6                            | 3.5 x 25.5 x 37            |
| Fujitsu Lifebook AH550          | 76                | 72                    | 89                     | 64                    |                        | ✓                  | ✓                           | 4              | 1    |       | 1   | 2.8                            | 4.6 x 26 x 37              |
| HP Probook 4710s                | 76                | 76                    | 79                     | 71                    | ✓                      | ✓                  | ✓                           | 4              | 1    |       | 1   | 3.1                            | 3.2 x 27 x 42              |
| Toshiba Satellite A500          | 76                | 88                    | 61                     | 68                    |                        | ✓                  | ✓                           | 4              | 1    | 1     | 1   | 2.9                            | 4.2 x 26 x 38              |
| Acer Aspire 5740G-434G          | 75                | 85                    | 67                     | 62                    |                        |                    |                             | 4              | 1    |       | 1   | 2.7                            | 3.7 x 25 x 38              |
| Apple MacBook                   | 73                | 66                    | 84                     | 75                    | ✓                      |                    |                             | 2              |      |       |     | 2.1                            | 2.7 x 23 x 33              |
| Sony VAIO VPCEB16FG             | 73                | 81                    | 63                     | 67                    |                        |                    |                             | 4              | 1    | 1     | 1   | 2.6                            | 3.6 x 25 x 37              |
| Lenovo Thinkpad SL410           | 70                | 65                    | 78                     | 68                    | ✓                      |                    |                             | 4              | 1    | 1     | 1   | 2.3                            | 4 x 23.2 x 34              |
| Pioneer Computers Dreambook M77 | 60                | 54                    | 71                     | 60                    |                        |                    |                             | 3              |      |       | 1   | 3.0                            | 4 x 28 x 39.6              |

**USING THE TABLE Scores** The overall score is made up of Performance: 50%; Battery life 30%; Ease of use 20%. **TABLE NOTES** Performance is tested using Windows 7 (including the MacBook, with Win 7 installed using Boot Camp for hardware comparison, although Mac OS X is the default OS). **Features** See What to Look For, above. Specifications are as test.

**CHOICE ONLINE**

To find out How We Test these laptop computers, log on to [www.choice.com.au/familylaptops](http://www.choice.com.au/familylaptops)

## WHAT TO BUY

**78%** Toshiba Satellite L550PRICE \$1599  
GOOD POINTS

- Best overall and performance scores.
- eSATA connection.
- Dial-up modem.

## BAD POINTS

- No recovery disc.
- Most expensive laptop on test.
- Heaviest laptop on test.

**76%** ASUS K52FPRICE \$999  
GOOD POINTS

- Equal-cheapest laptop on test.
- Recovery disc included.

## BAD POINTS

- Glossy screen surround.

BEST  
BUY**76%** Fujitsu Lifebook AH550PRICE \$1399  
GOOD POINTS

- Longest battery life.
- One-year security suite as standard.

## BAD POINTS

- Only 2GB of RAM as standard.
- Selection of 32- or 64-bit OS is permanent.
- Glossy screen surround.
- No recovery disc supplied.

**76%** HP Probook 4710sPRICE \$1299  
GOOD POINTS

- Recovery disc included.
- Non-reflective (matt) screen.
- Dial-up modem.

## BAD POINTS

- Glossy screen surround.

**76%** Toshiba Satellite A500PRICE \$1399  
GOOD POINTS

- Second-highest performance score.
- eSATA connection.

## BAD POINTS

- Shortest battery life.
- Glossy screen surround.
- No recovery disc included.

**75%** Acer Aspire 5740G-434GPRICE \$1099  
GOOD POINTS

- Third-highest performance score.
- Dial-up modem.

## BAD POINTS

- No recovery disc included.
- Glossy screen surround.



## ABOUT THE REST

The **Apple** had the best ease of use score and best overall style and design, but lacks a multimedia card reader and HDMI connection, and only has two USB ports.

The **Sony** has a built-in eSATA connection for attaching an external hard drive, but doesn't come with a recovery disc.

The **Lenovo** also has a built-in eSATA connection and the lowest running cost.

The **Pioneer Computers** model has a built-in modem and comes with a carry bag, but had the lowest scores for performance and ease of use, had no HDMI port, only 802.11g (not n) wireless networking and no recovery disc.

|                               | HDD (GB) | RAM (GB) | Screen size (inches) | Maximum screen resolution (pixels) | Contact                 | Price (\$) |
|-------------------------------|----------|----------|----------------------|------------------------------------|-------------------------|------------|
| el Core i5 430M @ 2.26GHz     | 500      | 4        | 17.3                 | 1600 x 900                         | toshiba.com.au          | 1599       |
| el Core i5 430M @ 2.26GHz     | 320      | 4        | 15.6                 | 1366 x 768                         | asus.com.au             | 999        |
| el Core i3 330M @ 2.13GHz     | 320      | 2        | 15.6                 | 1366 x 768                         | fujitsu.com.au          | 1399       |
| el Core 2 Duo P8700 @ 2.53GHz | 320      | 4        | 17.3                 | 1600 x 900                         | hp.com.au               | 1299       |
| el Core i5 430M @ 2.26GHz     | 500      | 4        | 16.0                 | 1366 x 768                         | toshiba.com.au          | 1399       |
| el Core i5 430M @ 2.26GHz     | 320      | 4        | 15.6                 | 1366 x 768                         | acer.com.au             | 1099       |
| el Core 2 Duo @ 2.26GHz       | 250      | 2        | 13.3                 | 1280 x 800                         | apple.com.au            | 1249       |
| el Core i3 330M @ 2.13GHz     | 500      | 4        | 15.5                 | 1920 x 1080                        | sony.com.au             | 1399       |
| el Core 2 Duo T6670 @ 2.2GHz  | 250      | 2        | 14.0                 | 1366 x 768                         | lenovo.com.au           | 999        |
| el Dual Core T2410 @ 2GHz     | 320      | 3        | 17.3                 | 1440 x 900                         | pioneercomputers.com.au | 1318       |

ough some may have changed by time of publication **Weight** Rounded to the nearest 0.1kg **Price** Recommended retail, as of June 2010.



Meet you later in town OK?  
OMG!!! Sounds gr8!!..  
kewl...!XOXO E3

## WHAT TO BUY



## 80% Nokia 6303 Classic

PRICE \$319

The 6303 Classic is a good all-round option for users wanting a bar-type phone, with a simple keypad layout and excellent display. SMS performance is good and it provides a pleasing combination of a short charging time with one of the longest talk and standby times on test. However, while this phone works on all networks, you won't get 3G performance or Next G coverage as it is a GSM-only phone.

### NUTSHELL

STORY DENIS GALLAGHER

>> All the phones on test cost less than \$300 (if you shop around), with several available for less than \$100.

>> A prepaid version will cost even less, but you may have to pay to unlock the phone before it will work on other networks.

## Talk and text only

You don't need to spend up big to get a mobile phone that performs basic tasks well.

**T**here are now many mobile phones that can perform a myriad of tasks, such as keeping appointments, playing your music collection, taking a photo and even telling you where to go while driving. However, this versatility can sometimes hamper the elementary tasks of making and taking phone calls. In an effort to bring some simplicity back into your life, CHOICE tested 16 models purely on how well they perform as a mobile phone.

### How we test basic phones

The overall score in the table (right) incorporates an evaluation of features and aspects that are important to someone who wants a solid, affordable phone, without the bells and whistles. For this test, we score the phone on the quality of its display and menu system for making a call, the ease of creating, sending and reading an SMS, and the sound quality when talking to another person. We also score the durability, reception quality and battery life.

We don't include a score on how good the sound is when playing music, or the quality of the photo it takes (if indeed it can take a photo). Some of these phones do have cameras and can play music, but we'd advise against replacing your iPod or compact digital camera with one. ■

| PRODUCT                       | PERFORMANCE       |                    |                  |                 |                   |
|-------------------------------|-------------------|--------------------|------------------|-----------------|-------------------|
| Brand / model (in rank order) | Overall score (%) | Handling score (%) | Keypad score (%) | Menus score (%) | Display score (%) |
| Nokia 6303 Classic            | 80                | 91                 | 65               | 75              | 94                |
| Nokia 3720 Classic            | 76                | 92                 | 65               | 72              | 94                |
| Samsung GT-B3210              | 73                | 81                 | 40               | 75              | 64                |
| LG GW300                      | 72                | 81                 | 50               | 73              | 76                |
| Nokia 2330 Classic            | 72                | 68                 | 65               | 71              | 69                |
| Nokia 2720 Fold               | 72                | 63                 | 70               | 71              | 69                |
| Nokia 2700 Classic            | 70                | 66                 | 60               | 64              | 71                |
| Nokia 1661                    | 68                | 71                 | 60               | 66              | 73                |
| Nokia 2220 slide              | 68                | 52                 | 60               | 61              | 69                |
| Nokia 5030                    | 68                | 67                 | 60               | 67              | 63                |
| Nokia 7230                    | 68                | 49                 | 65               | 86              | 71                |
| Samsung B3310                 | 68                | 70                 | 30               | 69              | 66                |
| Sony Ericsson W395            | 68                | 82                 | 55               | 64              | 71                |
| Sony Ericsson U100i Yari      | 67                | 73                 | 50               | 74              | 71                |
| Nokia 2730                    | 63                | 65                 | 50               | 64              | 56                |
| Sony Ericsson T715            | 62                | 71                 | 60               | 71              | 54                |

USING THE TABLE Scores The overall score is made up of: Handling: 10%; Keypad: 10%; Menus: 10%; Display: 10%; SMS: 10%; Sensitivity: 10%; Sound quality: 10%; Manual: 10%.



## 76% Nokia 3720 Classic

### PRICE \$269

The 3720 GSM phone has an IP54 rating, meaning it's designed to be shock-, dust- and water-resistant, with panels to keep out water and dust. An LED flashlight, together with a long talk and standby time, makes it a good choice for tradesmen. It also has the lowest SAR (specific absorption rate, a measure of radiation energy absorbed into the body) figure of the phones on test.



## 73% Samsung GT-B3210

### PRICE \$245

If you like using a QWERTY-style keyboard, the GT-B3210 is a much more affordable option than a BlackBerry, and its excellent SMS score makes it a good option for users who text as much as they talk. However, the small keys make it more difficult when dialling numbers for standard phone calls. Quad-band GSM support also means you're more likely to get reception when travelling overseas.

### ABOUT THE REST

**Nokia** makes more mobiles than any other company, and several of the Nokia models on test, including the **2330 Classic** and **2720 Fold** (clamshell type) would be suitable for the kids or as a backup if you've lost your phone and are waiting for the contract to end.

If you're looking for a phone with good reception and durability for about \$100, you could consider the **Nokia 2220 Slide**, **1661** or **5030**. However, these are the only phones on test with just dual-mode GSM network support.

SMS users may appreciate the QWERTY-style keyboard of the **L6 GW300** or the slide-out keyboard of the **Samsung B3310**, while users wanting a phone that works on the NextG (850MHz) band can choose either the **Sony Yari** or **T715**.

|                         |                  |                      |                   |                      |                      |                         | FEATURES             |                           |                         |                     | SPECIFICATIONS   |             |                   |           |     |            |                |                     |     |
|-------------------------|------------------|----------------------|-------------------|----------------------|----------------------|-------------------------|----------------------|---------------------------|-------------------------|---------------------|------------------|-------------|-------------------|-----------|-----|------------|----------------|---------------------|-----|
| Sound quality score (%) | Manual score (%) | Durability score (%) | Battery score (%) | Calling time (hours) | Standby time (days)* | Charging time (minutes) | Micro-USB connection | Charging via USB possible | Bluetooth A2DP (stereo) | Camera resolution** | Memory card slot | Flight mode | SAR rating (W/kg) | GSM bands | 3G  | Weight (g) | Contact        | Price (\$)          |     |
| 66                      | 73               | 77                   | 89                | 7:45                 | 16.0                 | 90                      | ✓                    | ✓                         | 3.2                     | Micro-SD            | ✓                | 1.15        | 3                 | 98        |     | 98         | nokia.com.au   | 319                 |     |
| 69                      | 58               | 79                   | 80                | 7:30                 | 15.5                 | 110                     | ✓                    | ✓                         | 2.0                     | Micro-SD            | ✓                | 0.48        | 3                 | 94        |     | 94         | nokia.com.au   | 269                 |     |
| 71                      | 60               | 81                   | 72                | 6:45                 | 11.0                 | 140                     | ✓                    | ✓                         | 2.0                     | Micro-SD            | ✓                | 0.63        | 4                 | 98        |     | 98         | samsung.com.au | 265                 |     |
| 71                      | 48               | 78                   | 76                | 7:15                 | 11.0                 | 140                     | ✓                    | ✓                         | 2.0                     | Micro-SD            | ✓                | 1.16        | 4                 | 98        |     | 98         | lge.com.au     | 299                 |     |
| 66                      | 63               | 81                   | 78                | 5:45                 | 14.5                 | 175                     |                      | ✓                         | 0.3                     |                     |                  | 0.98        | 4                 | 80        |     | 80         | nokia.com.au   | 109                 |     |
| 70                      | 68               | 94                   | 76                | 6:00                 | 13.0                 | 160                     |                      |                           | 1.3                     |                     |                  | 0.96        | 4                 | 92        |     | 92         | nokia.com.au   | 129                 |     |
| 70                      | 70               | 77                   | 79                | 6:30                 | 12.0                 | 180                     | ✓                    | ✓                         | 2.0                     | Micro-SD            | ✓                | 0.84        | 4                 | 85        |     | 85         | nokia.com.au   | 169                 |     |
| 64                      | 48               | 72                   | 80                | 6:30                 | 13.5                 | 80                      |                      |                           |                         |                     |                  | 1.38        | 2                 | 73        |     | 73         | nokia.com.au   | 69                  |     |
| 70                      | 75               | 63                   | 72                | 7:15                 | 16.0                 | 140                     |                      |                           | 0.3                     |                     |                  | 0.73        | 2                 | 82        |     | 82         | nokia.com.au   | 109                 |     |
| 65                      | 65               | 81                   | 83                | 8:00                 | 11.5                 | 170                     |                      |                           |                         |                     |                  | 1.06        | 2                 | 83        |     | 83         | nokia.com.au   | 89                  |     |
| 71                      | 55               | 74                   | 58                | 5:15                 | 11.0                 | 120                     | ✓                    | ✓                         | 3.2                     | Micro-SD            | ✓                | 0.97        | 4                 | ✓         | 103 |            | 103            | nokia.com.au        | 209 |
| 70                      | 63               | 80                   | 74                | 6:30                 | 11.5                 | 125                     | ✓                    | ✓                         | 2.0                     | Micro-SD            | ✓                | 0.66        | 4                 | ✓         | 101 |            | 101            | samsung.com.au      | 149 |
| 60                      | 65               | 55                   | 78                | 6:15                 | 8.5                  | 160                     |                      | ✓                         | 2.0                     | MS Micro            | ✓                | 0.88        | 4                 | ✓         | 96  |            | 96             | sonyericsson.com.au | 219 |
| 77                      | 68               | 45                   | 79                | 7:30                 | 11.0                 | 120                     |                      | ✓                         | 5.0                     | Micro-SD            | ✓                | 0.69        | 4                 | ✓         | 117 |            | 117            | sonyericsson.com.au | 249 |
| 69                      | 58               | 73                   | 63                | 5:30                 | 13.0                 | 140                     | ✓                    | ✓                         | 2.0                     | Micro-SD            | ✓                | 1.02        | 4                 | ✓         | 88  |            | 88             | nokia.com.au        | 179 |
| 72                      | 38               | 50                   | 73                | 7:30                 | 10.5                 | 165                     |                      | ✓                         | 3.2                     | Micro-SD            | ✓                | 0.90        | 4                 | ✓         | 98  |            | 98             | sonyericsson.com.au | 229 |

durability: 10%, Battery 10%, Price Recommended retail, as of June 2010. You can get most of these phones cheaper by shopping around. **TABLE NOTES** \* Rounded to the nearest half-day. \*\* Measured in megapixels. All phones on test can be operated in hands-free mode and have a vibration (silent) mode and an FM radio. None have a touchscreen.

### WHAT TO LOOK FOR

**Keypad** Look for overall quality and durability with buttons that are sensibly placed.

**Display** Readability is an important aspect to consider with a basic mobile.

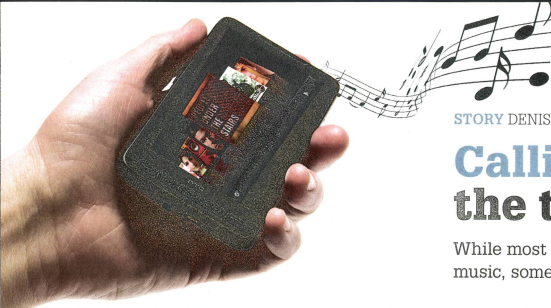
**QWERTY keyboard** Consider this if you text as much as you talk. Look for a keypad with ample spacing between the keys.

**Camera** can be useful, although the resolution for a basic phone is not a major concern unless you print your images.

**Battery life** needs to match the way you use your phone, particularly if you talk for extended periods between charging.

**Charging the phone using the USB connection** can be useful if you have a portable computer and no mains power is available.





STORY DENIS GALLAGHER

## Calling the tune

While most mobile phones can play music, some are true music players.

### NUTSHELL

>>CHOICE tests 16 models to find the best music phone.

**M**ost of the latest mobile phones can take photos and capture video, but CHOICE has found they rarely perform as well as a dedicated camera or camcorder when carrying out these tasks.

Most new phones can also play a music file, but this in itself doesn't make it a music phone. Features such as one-button access to the music playing mode, easy navigation

to your music collection, and online functions such as downloading album art and track names are considered standard on most popular music players, and should be incorporated into your mobile if you are using it to replace your music player.

The phenomenal success of the Apple iPhone, regarded as one of the best music playing mobiles available, shows you don't have to make compromises when using your phone as

| PRODUCT                       |                   | PERFORMANCE                     |    |                          |    |                     |    |                      |    |                          |    |                         |      |                      |     | FEATURES          |   |               |     |                       |   |                      |  |                      |  |                      |  |                         |  |                     |  |                  |  |                |  |       |  |                       |  |          |  |                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| Brand / model (in rank order) | Overall score (%) |                                 |    |                          |    |                     |    |                      |    |                          |    | BATTERY PERFORMANCE     |      |                      |     |                   |   |               |     |                       |   |                      |  |                      |  |                      |  |                         |  |                     |  |                  |  |                |  |       |  |                       |  |          |  |                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               |                   | Ease of use for music score (%) |    | Volume setting score (%) |    | Playlists score (%) |    | Navigation score (%) |    | Music transfer score (%) |    | Sound quality score (%) |      | Ergonomics score (%) |     | Display score (%) |   | SMS score (%) |     | Sensitivity score (%) |   | Durability score (%) |  | Calling time (hours) |  | Standby time (days)* |  | Charging time (minutes) |  | USB connection type |  | Charging via USB |  | Next G support |  | Wi-Fi |  | Assisted GPS built in |  | FM radio |  | Memory card slot (Micro-SD) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| LG BL40 New Chocolate         | 81                | 68                              | 68 | 78                       | 98 | 78                  | 76 | 80                   | 90 | 87                       | 82 | 92                      | 5:28 | 9.5                  | 120 | Micro             | ✓ |               | b/g | ✓                     | ✓ | ✓                    |  |                      |  |                      |  |                         |  |                     |  |                  |  |                |  |       |  |                       |  |          |  |                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**USING THE TABLE Scores** The overall score is made up of: Ease of use for music: 10%; Volume settings: 10%; Playlists: 10%; Navigation: 10%; Music transfer: 10%; Sound quality: 10%; Ergonomics: 8%; Display: 8%; SMS: 8%; Sensitivity: 8%; Durability: 8%. **Features and system** See What to Look For, page 50. **TABLE NOTES** \* Rounded to the nearest half-day. **Price** Recommended retail, as of June 2010. **(A)** Model available for outright sale from www.mobilitychoice.com.au. All phones on test: Support 3G (except the Nokia X3 and Samsung GT-C3510), have an HTML browser, flight mode, vibration-only mode and hands-free

a music player – and other phone companies have taken note. Some of the latest music phones deliver music player features and functionality that would rival a dedicated MP3 music player. When shopping around for your next phone, decide on the features you want, then ask yourself: “Would I use this as a music player even if it couldn’t be used to make phone calls?” If the answer is yes, you’ve found your ideal music phone.

Note: Although the Apple iPhone 3GS would have earned the top score it was not included in this test, as the fourth-generation version was announced as we went to print. CHOICE will cover the latest model in our next Smartphone roundup later this year and will also feature it as a First Look as soon as it becomes available to test. >

## WHAT TO BUY

|                       |       |
|-----------------------|-------|
| LG BL40 New Chocolate | \$999 |
| Nokia X6 16GB         | \$639 |
| Nokia 5230            | \$359 |



## ABOUT THE REST

The **Sony Ericsson U1i Satio** is a good all-round multimedia phone, but doesn’t support a standard headphone jack. It is one of the few models on test, together with the **Sony Ericsson Aino** and **Samsung GT-C3510 Genoa**, with a proprietary USB connection. The **Nokia X3** is a GSM-only slider phone with very good music player features, although it lacks Wi-Fi. It is also the only model apart from the **Nokia 6700 classic** with no touchscreen. The **HTC HD2** is a large phone and integrates well with a Windows PC, while the **HTC Tattoo** and **Legend** could be good options if you prefer

the Android OS. The **Sony Ericsson U5i Vivaz** has all the features you could want in a music phone, however general music controls are not as good as our recommended models. The **LG GW620** is the least expensive Android phone on test; it performs well as a music player but is let down by having the lowest display and SMS performance of the models on test. For Android fans, the **Samsung GT-i5700 Galaxy** is an affordable option; though it uses the older 1.5 version software unlike other Android phones such as the **Google** and **Motorola**, which use more recent versions.

## SPECIFICATIONS

| AAC+ support | WMA support | Touchscreen display | Camera resolution (megapixels) | SAR rating (W/kg) | Operating system | Screen display (mm, W x H) | Dimensions (mm, W x H x D) | Weight (g) | Contact          | Price (\$) |
|--------------|-------------|---------------------|--------------------------------|-------------------|------------------|----------------------------|----------------------------|------------|------------------|------------|
| ✓            | ✓           | ✓                   | 5.0                            | 0.76              | Individual       | 40 x 94                    | 12 x 52 x 129              | 130        | lge.com.au       | 999        |
| ✓            | ✓           | ✓                   | 5.0                            | 1.11              | Symbian 5        | 39 x 70                    | 15 x 51 x 111              | 123        | nokia.com.au     | 639        |
| ✓            | ✓           | ✓                   | 2.0                            | 1.10              | Symbian 5        | 39 x 70                    | 16 x 52 x 111              | 114        | nokia.com.au     | 359        |
| ✓            | ✓           | ✓                   | 5.0                            | 0.63              | Win Mobile 6.5   | 56 x 93                    | 11 x 67 x 121              | 158        | htc.com/au       | 829        |
| ✓            | ✓           | ✓                   | 3.2                            | 0.73              | Individual       | 34 x 45                    | 15 x 49 x 96               | 104        | nokia.com.au     | 329 (A)    |
|              |             | ✓                   | 12.1                           | 1.58              | Symbian 5        | 44 x 78                    | 13 x 55 x 112              | 127        | sonyericsson.com | 999        |
|              |             | ✓                   | 8.1                            | 0.74              | Individual       | 37 x 66                    | 16 x 50 x 105              | 136        | sonyericsson.com | 659        |
| ✓            | ✓           | ✓                   | 5.0                            | 0.57              | Android 2.1      | 45 x 67                    | 12 x 56 x 112              | 126        | htc.com/au       | 599        |
| ✓            | ✓           | ✓                   | 3.2                            | 1.25              | Android 1.6      | 42 x 57                    | 16 x 56 x 106              | 113        | htc.com/au       | 399        |
| ✓            | ✓           | ✓                   | 5.0                            | 0.82              | Android 1.5      | 42 x 63                    | 18 x 55 x 110              | 140        | lge.com.au       | 399        |
| ✓            | ✓           | ✓                   | 5.0                            | 0.64              | Android 2.1      | 46 x 82                    | 15 x 60 x 116              | 170        | motorola.com.au  | 999        |
| ✓            | ✓           | ✓                   | 8.1                            | 1.04              | Symbian 5        | 40 x 70                    | 13 x 53 x 107              | 97         | sonyericsson.com | 799        |
| ✓            | ✓           | ✓                   | 5.0                            | 0.82              | Android 2.1      | 48 x 80                    | 13 x 60 x 119              | 134        | google.com.au    | 849 (A)    |
| ✓            | ✓           | ✓                   | 5.0                            | 0.41              | Individual       | 33 x 45                    | 12 x 45 x 110              | 114        | nokia.com.au     | 439        |
| ✓            | ✓           | ✓                   | 3.2                            | 0.60              | Android 1.5      | 45 x 68                    | 15 x 59 x 115              | 123        | samsung.com.au   | 489        |
| ✓            | ✓           | ✓                   | 1.3                            | 0.64              | Individual       | 42 x 57                    | 15 x 57 x 104              | 92         | samsung.com.au   | 129        |

(speakerphone); record video. All models include quad band GSM support, which provides the widest network support when using your phone overseas.

## HOW WE TEST

### Ease of use as a music player

A user panel assesses the **volume settings** controls, access to **song playlists** and **navigation controls** in music mode.

**Music transfer** is assessed for performance speed when moving music from a PC to the phone.

**Sound quality** Our testers carry out acoustic measurements such as frequency response.

**Ergonomics** They assess the keypad, handling and controls.

**Display** Our testers look at the size of the display as well as quality of the colour and clarity.

**SMS** is examined by writing and receiving an SMS and checking the suitability of the display for texting.

**Sensitivity** Our testers measure the phones’ receiving sensitivity and sending power in both the 900MHz and 1800MHz bands.

**Durability** They simulate falls from a table or out of a shirt pocket up to 25 times, as well as storing the phones in hot, damp conditions and carrying out a rain test.

## WHAT TO BUY



**81%** LG BL40 New Chocolate

**PRICE** \$999

The slim handset has an excellent quality display with a good menu system that is very easy to navigate. A status bar at the top of the screen provides access to the phone's controls and music player; simply tap the song title to play the selection and listen through the built-in stereo speakers or headphones. The battery life is not as impressive as with the other recommended models [right]; however, you can charge the phone directly from your PC using a USB connection.



**81%** Nokia X6 16GB

**PRICE** \$639

This phone shows a strong music focus, with excellent battery performance giving 26 hours of life using standard headphones and more than 12 hours using Bluetooth headphones. While it's the only model on test without removable memory, the 16GB internal drive should satisfy most users' music storage requirements holding up to 4000 songs. The capacitive touchscreen is responsive and accurate, making it excellent for SMS as well as providing very good access to playlists and individual songs.



**79%** Nokia 5230

**PRICE** \$359

This is one of the cheapest music-playing mobile phones on test and compares well with phones at double the price. It's also the only recommended model with Next G support. Music transfer through a USB connection is quick and effective; however, no Wi-Fi means you can't use your wireless home network to listen to internet radio or music stored on your computer. Once into the music playing mode, you can easily select albums, artists and song lists using the large touchscreen.

BEST BUY

## WHAT TO LOOK FOR

A **USB connection** of any type lets you transfer files to your computer. Most models on test use a standard mini or micro USB connection and can have the phone appear on the PC as a removable drive. Some models use a proprietary connection.

**Charging via USB** is handy when you can't get to a mains power adapter, allowing you to use your laptop PC to charge your phone.

**Wi-Fi capability** allows you to browse the internet using your existing Wi-Fi wireless connection at home or at a Wi-Fi hotspot when you're out and about. You can also listen to your music collection stored on your PC connected to a home network (802.11g delivers a faster connection than 802.11b).

**Memory card** allows you to store photos, music and video and transfer them to a PC. Check the exact type of memory you'll need, as the cards are not interchangeable, even though they look very similar. Most phones

use MicroSD cards, while some Sony Ericsson phones use Memory Stick (MS) Micro.

**Headphone connection type** A phone with a 2.5mm or 3.5mm jack allows you to use a standard set of headphones to listen to music, while a proprietary connection forces you to use special headphones.

**Stereo Bluetooth (A2DP)** allows you to listen to your music without cables via a pair of Bluetooth stereo headphones. All the phones on test have this feature.

**Audio format support** is important if you purchase music online. All models on test support the common MP3 file format and all except the LG BL40 support Advanced Audio Coding (AAC). A more advanced version called AAC+ offers support for digital radio streaming. The Windows Media Audio (WMA) format was introduced by Microsoft.

**Specific absorption rate (SAR)** is a figure supplied by the manufacturer indicating the

amount of energy per kilogram of body weight absorbed when using the phone. Although all models on test meet the Australian standard, you could consider a model with a lower SAR value if this is a concern to you.

**Operating system (OS)** enables mobiles to perform tasks beyond simply making a call, allowing the phone to run productivity and media playing applications.

- The **Symbian OS** is the oldest and most widely used and can be found in Nokia and some Sony Ericsson phones.
- **Windows Mobile 6.5**, used on the HTC HD2 in this test, has a familiar Microsoft Windows look and feel.
- Google's **Android OS** is an open source OS, allowing developers to add functionality to phones without having to pay for a licence. There have already been several major revisions, with the latest 2.1 version in the HTC Legend and Google's Nexus phone.

STORY DENIS GALLAGHER

## Pocket rockets

You don't have to pay a lot for quality video, as some of these surprisingly good memory-catchers reveal.

### NUTSHELL

>> Some of the pocket camcorders on test deliver surprisingly good video.  
>> HDMI connectivity allows you to easily show recorded footage on your home TV.

**P**ocket camcorders (also known as pocket video cameras or web camcorders) are a relatively new category of recording device. They deliver video for those not wanting to spend more than a few hundred dollars, and can upload video to sharing sites such as YouTube using a PC with a minimum of fuss. CHOICE tested eight pocket camcorders to see which deliver the best combination of video and audio quality, and which are easiest to use.

Although designed for the web-sharing generation, several of the models on test record video good enough to enjoy on a large-screen TV, and most are easy to use. They all capture video using the common H.264 codec for video and use the MPEG-4 video format, which has widespread support among PC and Apple media players as well as many of the latest TVs and DVRs.

### What about my phone's video camera?

With so many devices now able to capture video – including digital SLR and compact cameras, and even

mobile phones – we decided to look at a selection of popular digital devices and carried out the same video and audio quality part of our test, to see how they stack up against the pocket camcorders. We also tested an HD camcorder, the Canon Legria HF100, which costs about \$1000 and performed well in our previous camcorder testing. Other devices include the Nikon D5000 (a digital SLR camera), Canon PowerShot SX20 IS (compact camera), Apple iPhone and iPod Nano and Samsung I8910HD mobile phone.

As expected, the Canon HD camcorder delivered the best video quality – but only just beat the Flip Ultra HD, our What to Buy pocket camcorder (below). The Canon PowerShot performed well for audio, but its video quality scored below the two Flip pocket camcorders. Of the rest, only the Nikon compared favourably with the top-performing pocket camcorders; the iPhone and Nano delivered borderline video and audio quality, while the Samsung mobile phone was judged the worst of all the models on test for video and audio combined. >

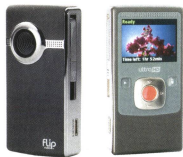
### WHAT TO BUY

## 73% Flip Ultra HD

### PRICE \$240

The Flip Ultra HD is not the smallest model on test, but will still slip into most pockets and is ready for action in just 2.5 seconds. A 'play' and 'delete' button on either side of a large red recording button are basically all you need to operate the camera, while a directional rocker switch to navigate through the menu system to change settings is really more complex than necessary.

The video and audio quality is the best of the pocket camcorder models on test, with a stereo microphone and the ability to store more than two hours of video on 8GB of internal storage. While the lack of removable memory may not be a big issue if you can find a PC to download your video, it would have been nice to see an SD card slot to accompany the internal storage.



The HDMI connection remains the easiest way to display the video and audio on a modern flat-panel TV, providing a simple and effective way to show video. However, you may find it difficult to show your footage directly from the camera if you have an old CRT TV, as there is no AV cable.

The Ultra HD is also the only model on test that doesn't use a lithium-ion battery pack. It comes with rechargeable AA batteries and you can also use standard alkaline AA batteries as backup.

Internal video storage is convenient and easy to use, but removable memory camcorders allow for potentially unlimited video-making

## WHAT TO LOOK FOR

**Connectivity** USB has taken over from Firewire as the most common connection option to get video from a camcorder to a computer. A pocket camcorder is an ideal device for creating video to upload to sharing sites such as YouTube. All models on test support USB 2.0 and include software to convert the video into an internet-friendly format.

**Accessories** The accessories needed for a pocket camcorder include a mini HDMI cable (for models with a HDMI output) to watch your video on a flat-panel TV, or an AV cable to connect to the composite video and stereo inputs of any TV, including older CRT models. None of the models on test support component or S-video. **Optical zoom** is not a feature you would expect to find on a pocket camcorder. The Sony is the only model that has it, so if you want to get close to the action, move closer to the scene you wish to shoot or be prepared to spend a couple of hundred dollars extra.

**Aspect ratio** While all the models on test shoot at a wide angle (16:9),



**Video storage capacity** The storage options with the models on test are either internal flash memory (4GB or 8GB) or removable Secure Digital High Capacity (SDHC) cards that can be purchased separately in sizes up to 32GB. While internal storage is convenient and easy to use, removable memory camcorders allow for potentially unlimited video-taking – simply take the full card out, insert another and continue shooting. Unfortunately, none of these models have both a large internal storage and support for removable SD cards. You can expect to take up around 1GB of space to store about one hour of HD quality video.

some also shoot in a 4:3 aspect ratio, which can be handy when showing video on an old CRT TV or computer monitor.

**Video resolution** All the models on test can record at 720p resolution, which is similar in quality to the video you watch on free-to-air HD TV, while some models can also record in 1080p, which should look as good as a Blu-ray movie.

**Photo function** allows you to take a high-resolution still image up to the quality of the effective resolution

of the camera. If the camcorder does not have this function you can extract a single frame of video instead, which should reproduce well on a TV screen or computer monitor but won't deliver a photo-quality print.

**Macro function** allows you to get in close to your subject.

**Face detection** allows you to simply compose your video scene, and the camera automatically adjusts the focus to keep the main faces in the scene sharp.

| PRODUCT                       |                   | PERFORMANCE             |                         |                                   |                                  |                                            |                   |                                                  |                                                                      | FEATURES             |                |                |                |
|-------------------------------|-------------------|-------------------------|-------------------------|-----------------------------------|----------------------------------|--------------------------------------------|-------------------|--------------------------------------------------|----------------------------------------------------------------------|----------------------|----------------|----------------|----------------|
| Brand / model (in rank order) | Overall score (%) | Video quality score (%) | Audio quality score (%) | Ease of use (recording) score (%) | Ease of use (playback) score (%) | PC transfer and online uploading score (%) | Battery score (%) | Maximum recording time at highest quality (mins) | Time to transfer 10 minutes of video to PC at highest setting (secs) | Start-up time (secs) | Macro function | Photo function | Face detection |
| Flip Ultra HD                 | 73                | 77                      | 75                      | 60                                | 47                               | 65                                         | 84                | 135                                              | 90                                                                   | 2.5                  |                |                |                |
| Flip Mino HD                  | 66                | 72                      | 68                      | 60                                | 43                               | 65                                         | 60                | 84                                               | 90                                                                   | 3.4                  |                |                |                |
| Sony Xacti VPC-CG10           | 66                | 61                      | 62                      | 77                                | 67                               | 94                                         | 60                | 79                                               | 74                                                                   | 6.5                  | ✓              | ✓              | ✓              |
| Kodak Zi8                     | 64                | 63                      | 53                      | 80                                | 77                               | 82                                         | 59                | 77                                               | 99                                                                   | 3.9                  | ✓              | ✓              | ✓              |
| Sony Bloggie MHS-PM5K         | 62                | 66                      | 67                      | 50                                | 60                               | 49                                         | 61                | 85                                               | 144                                                                  | 3.4                  |                | ✓              | ✓              |
| Toshiba Camileo S20           | 62                | 58                      | 55                      | 67                                | 47                               | 81                                         | 75                | 112                                              | 84                                                                   | 7.1                  | ✓              | ✓              | ✓              |
| Creative VF 0580 Vado HD      | 59                | 54                      | 42                      | 67                                | 43                               | 89                                         | 89                | 132                                              | 79                                                                   | 7.7                  |                |                |                |
| JVC GC-FM1                    | 49                | 64                      | 22                      | 43                                | 50                               | 63                                         | 50                | 75                                               | 147                                                                  | 3.6                  | ✓              | ✓              |                |

**USING THE TABLE Scores** The overall score is made up of: Video quality: 40%; Audio quality: 25%; Ease of use (recording): 10%; Ease of use (playback) 5%; PC transfer and online uploading score 10%; Battery score 10%. **Maximum recording time at highest quality** This is not comparative, as the video quality differs from one model to another. **Start-up time**



## HOW WE TEST

**Video quality** All video recordings are made at the maximum resolution setting in auto mode. The devices are mounted on a tripod to record our test scene, with a mix of static and moving objects in the foreground and background, for one minute with panning. The lighting conditions are controlled to simulate outdoor (light temperature 5600K with an illumination level at 3500 lux), artificial (fluorescent lamp at 3200K and 1000 lux) and low light at about 12 lux.

The recordings are played back on 24-inch LCD monitors with the resolution set to 1920 x 1200p, and a three-person panel evaluates sharpness, resolution, colour fidelity, exposure and contrast gradation.

**Audio quality** The quality of the recorded sound is judged by three testers, evaluating overall audio quality.

**Ease of use** is carried out by evaluating aspects such as the menu controls during recording and playback, as well as the quality of information supplied on the LCD screen.

**PC transfer and online uploading**

is evaluated for speed and ease of use when moving video footage from the camcorder to a PC, as well as the software used to prepare and upload video to a site such as YouTube.

**Battery score** is tested using the camcorder at the highest resolution possible and measuring the recording time taken before the battery is discharged. Our testers also evaluate the time taken to charge the model using the USB connection if available.

We test these camcorders' batteries at the highest possible resolution, measuring the time taken to record before it's discharged

## ABOUT THE REST

The **Flip Mino HD** is light and tiny, with the second-best video and audio quality on test. However, there is no HDMI connection (only a composite AV output connection), so unless the video is downloaded to a PC using the USB plug, you won't be able to show the video in full HD.

The **Sanyo's** video and audio did not perform as well as our top two models, but it does have an optical (5X) zoom and the 10 megapixel resolution sensor is a useful feature

if you want to take good quality still images. It's also easy to use, with quick video transfer speeds to a PC.

Although the **Kodak** is very easy to use, the video and audio quality of the **Sony** is better. The Sony also comes with a lens attachment that allows you to capture video in a 360° span. The 360° effect produces interesting video, but the overall quality is not great.

The **Toshiba** is one of the slowest models to start up, but delivers good video in normal daylight conditions.

The video and audio quality of the **Creative** is discernibly worse than the top-performing camcorders, however the software is easy to use and the quick transfer speeds onto a computer might make it a good option if you only want to share your video online.

The **JVC** is the smallest and lightest model on test, with lots of features, but although its video quality is OK its audio performance leaves a lot to be desired.

## SPECIFICATIONS

| Included | USB plug included in unit | Mini-USB connector built in | Recording in 1080p (1920 x 1080 pixels) | 4:3 aspect ratio | HDMI connection | AV cable included | Mono or stereo microphone | Video storage capacity | Container * | Maximum frame rate | Effective resolution (megapixel) | LCD monitor, screen diagonal size (mm) | Maximum video resolution (pixels) | Dimensions (mm, W x H x D) | Weight (g) | Contact         | Price (\$) |
|----------|---------------------------|-----------------------------|-----------------------------------------|------------------|-----------------|-------------------|---------------------------|------------------------|-------------|--------------------|----------------------------------|----------------------------------------|-----------------------------------|----------------------------|------------|-----------------|------------|
| ✓        | ✓                         |                             |                                         |                  | ✓               |                   | Stereo                    | 8GB                    | MP4         | 30                 | 1                                | 49                                     | 1280 x 720                        | 55 x 108 x 30              | 175        | theflip.com     | 240        |
| ✓        |                           |                             |                                         |                  |                 | ✓                 | Stereo                    | 4GB                    | MP4         | 30                 | 1                                | 36                                     | 1280 x 720                        | 51 x 101 x 20              | 99         | theflip.com     | 199        |
|          |                           | (A)                         | ✓                                       |                  | ✓               | ✓                 | Stereo                    | SDHC                   | MP4         | 60                 | 10                               | 76                                     | 1280 x 720                        | 38 x 113 x 73              | 190        | sanyo.com.au    | 499        |
| ✓        |                           |                             | ✓                                       |                  | ✓               | ✓                 | Mono (B)                  | SDHC                   | MOV         | 60                 | 5                                | 61                                     | 1920 x 1080                       | 62 x 114 x 23              | 137        | kodak.com.au    | 250        |
| ✓        |                           |                             | ✓                                       |                  | ✓               | ✓                 | Mono                      | SDHC                   | MP4         | 60                 | 5                                | 69                                     | 1920 x 1080                       | 58 x 109 x 21              | 131        | sony.com.au     | 299        |
|          | ✓                         | ✓                           | ✓                                       | ✓                | ✓               | ✓                 | Mono                      | SDHC                   | AVI         | 60                 | 5                                | 75                                     | 1920 x 1080                       | 18 x 109 x 63              | 124        | toshiba.com.au  | 200        |
| ✓        |                           |                             | ✓                                       |                  | ✓               | ✓                 | Mono                      | 8GB                    | AVI         | 30                 | 1                                | 51                                     | 1280 x 720                        | 55 x 105 x 23              | 100        | au.creative.com | 250        |
|          |                           |                             | ✓                                       |                  | ✓               | ✓                 | Mono                      | SDHC                   | MOV         | 60                 | 8                                | 49                                     | 1440 x 1080                       | 54 x 97 x 17               | 96         | jvc.com.au      | 199        |

\*The time taken from pressing the "power on" button to the point where the camera is ready to record video. Price Recommended retail, as of June 2010.

BLE NOTES \* All models use the H.264 codec and MPEG-4 video format. (A) Dedicated USB/AV connection. (B) External stereo microphone available as an optional extra.



STORY CHRIS RUGGLES

## Less than well connected

A cheaper alternative to a DVR – but you only get what you pay for.

### NUTSHELL

>> These products may save you money, but you'll have to compromise on features and performance.

>> Most are difficult to use and don't work particularly well.

**D**igital video recorders (DVRs) are the modern equivalent of the VCR, but they can be expensive. If you have a spare USB external hard drive with enough capacity (we suggest at least 100GB), a set-top box (STB) with a USB port designed for attaching a separate hard drive could be a cheaper way to record digital TV. The STBs on test have the necessary software to allow you to set up recordings and watch later.

The DGTEC, Beyonwiz, Strong SRT5425 and Topfield models are easy to set up and get started, and all those in our What to Buy list (opposite) have the basic functions necessary for recording and managing files, as well as acceptable overall ease of use. However, all have only a single digital tuner, which means you can only record one program at a time. To watch another program at the same time, you would need to switch to the TV tuner by using the TV's remote control to change the input from the STB to the TV. ■

### HOW WE TEST

**Ease of use** Our tester, Scott O'Keefe, sets up each set-top box with a 1TB (1024GB) hard drive and schedules a number of recordings. He carefully goes through the manual and notes any discrepancies between the instructions and how the device actually performs.

Scott assesses the remote control, onscreen and front panel displays and controls for clarity and ease of use.

**Digital tuner performance** The tuner is subjected to a number of tests to see how well it performs with both weak and strong signals in the UHF and VHF bands, and that simulate interference such as from a microwave oven, or where the signal is bouncing off a number of surfaces.

**Energy use** Scott measures the energy used by the device when in standby mode.

| Product                          | Performance       |                       |    |                                     |                          | Features                       |                   |               |          |                | Specifications                           |           |              |                       |                            |             |                          |            |
|----------------------------------|-------------------|-----------------------|----|-------------------------------------|--------------------------|--------------------------------|-------------------|---------------|----------|----------------|------------------------------------------|-----------|--------------|-----------------------|----------------------------|-------------|--------------------------|------------|
| Brand / model<br>(in rank order) | Overall score (%) | Ease of use score (%) |    | Digital tuner performance score (%) | Standby energy score (%) | Standby energy consumption (W) | USB (front, rear) | Supports NTFS | Ethernet | S-video output | Digital audio output (coaxial / optical) | Timeshift | Forward skip | Timer recording limit | Dimensions (cm, H x W x D) | Weight (kg) | Contact                  | Price (\$) |
| Topfield TBF7120 + 320GB HDD     | 65                | 58                    | 70 | 80                                  | 0.57                     | 0/1                            |                   |               |          | -/-            | ✓                                        |           |              | 68                    | 7 x 34 x 28                | 2.1         | itopfield.com.au         | 299        |
| Phoenix JT9200HD                 | 62                | 53                    | 64 | 100                                 | 0.42                     | 1/0                            | ✓                 |               |          | -/-            | ✓                                        |           | ✓            | 8                     | 7 x 29 x 24                | 1.4         | phoenixtelevision.com.au | 130        |
| Strong SRT5441 (A)               | 61                | 59                    | 59 | 80                                  | 0.65                     | 1/1                            |                   | ✓             |          | -/-            | ✓                                        | ✓         | ✓            | 32                    | 7 x 34 x 26                | 2.1         | strong.com.au            | 159        |
| DGTEC DGHDD6760 (A)              | 59                | 42                    | 70 | 100                                 | 0.22                     | 1/0                            |                   |               |          | ✓              | -/-                                      |           |              | ns                    | 5 x 25 x 19                | 0.9         | dgtec.com.au             | 129        |
| Beyonwiz DP-H1                   | 57                | 61                    | 66 | 0                                   | 3.24                     | 0/2                            |                   | ✓             | ✓        | ✓              | ✓                                        | ✓         | ✓            | 100                   | 7 x 39 x 31                | 2.8         | beyonwiz.com.au          | 299        |
| Kogan KGNFSTBVAA                 | 57                | 49                    | 70 | 40                                  | 1.17                     | 1/0                            | ✓                 |               |          | ✓              | -/-                                      | ✓         | ✓            | 8                     | 5 x 24 x 14                | 0.7         | kogan.com.au             | 99         |
| TEAC HDVR845                     | 57                | 47                    | 59 | 100                                 | 0.49                     | 0/1                            |                   |               |          | ✓              | -/-                                      | ✓         |              | 10                    | 5 x 26 x 23                | 1.1         | teac.com.au              | 179        |
| Akai AD181X                      | 55                | 43                    | 68 | 60                                  | 0.89                     | 1/0                            |                   |               |          | ✓              | -/-                                      |           |              | ns                    | 5 x 27 x 18                | 0.9         | akai.com.au              | 150        |
| Strong SRT5425                   | 54                | 51                    | 57 | 60                                  | 0.88                     | 1/0                            |                   |               |          | ✓              | -/-                                      | ✓         |              | 8                     | 5 x 25 x 20                | 1.0         | strong.com.au            | 129        |
| Yess DVB-T9300                   | 40                | 43                    | 32 | 60                                  | 0.99                     | 1/0                            | ✓                 |               |          | ✓              | -/-                                      |           |              | ns                    | 5 x 22 x 15                | 0.7         | yess.com.au              | 109        |

**USING THE TABLE** The overall score is made up of: Ease of use: 50%; Digital tuner: 40%; Standby power: 10%. **Features** USB (front, rear) refers to the number of ports. **Supports NTFS** NTFS is a more efficient hard drive format than FAT32, which all the models on test support. **Ethernet** allows you to connect to a network. **S-video output** This connection could be useful for older TVs. **Digital audio output** allows you to send digital sound to a home theatre receiver. **Timer recording limit** refers to the number of events that can be scheduled. **Timeshift** allows you to pause when watching and/or wind back without having to press the record button. **Forward skip** Also called "ad skip", this allows you to jump forward through a recording by small increments (such as 10-30 seconds). **ns** Not stated. **Dimensions** are rounded up to nearest cm. **Weight** is rounded up to nearest 100g. **Price** Recommended retail, as of May 2010. **TABLE NOTES (A)** Discontinued, but may still be available in stores.

## WHAT TO BUY



**65%** Topfield TBF7120 + 320GB HDD

PRICE \$299

## GOOD POINTS

- Recordings are labelled more comprehensively than any other unit on test, listing the program name, date, time and channel.
- Comprehensive user manual.

## BAD POINTS

- Does a lengthy check of files and folders whenever the USB drive is reconnected.
- Works OK with the bundled 320GB USB drive, but locks up on timer recording with our 1TB drive.
- No thumbnail images for recordings.
- Remote control buttons are too closely spaced.



**62%** Phoenix JT9200HD

PRICE \$130

## GOOD POINTS

- Hard power switch (for greater power savings).
- Best remote control (but still only OK).

## BAD POINTS

- Recordings are not labelled with program name.
- Recording deletion is unintuitive.
- Poor front panel display – it's small, displays limited information, and the blue digits are difficult to read.



**61%** Strong SRT5441

PRICE \$159

## GOOD POINTS

- Hard power switch (for greater power savings).
- Also supports eSATA drive connection.
- Has a USB drive speed check option.
- Best front panel controls (but still only borderline).
- Ethernet port to connect to a network.

## BAD POINTS

- Recording deletion requires a pass code to be entered each time.

## WHAT TO LOOK FOR

## WHAT THEY (ALMOST) ALL HAVE/CAN DO

- One high-definition digital TV tuner.
- HDMI output.
- Coaxial antenna pass-through socket (to allow another device to access the antenna).
- Composite and component video outputs.
- Stereo analogue audio output.
- Ability to play other media via the USB port (except the TEAC HDVR845).
- Support favourite channels and schedule recordings from the EPG.
- Support firmware updates via a USB device.

## WHAT THEY (ALMOST) ALL CAN'T DO

- Record Pay TV.
- Support changing the thumbnail (if any) of a recording.
- Support searching of recordings.
- Support partial deletion or recorded file division.
- Display video thumbnails for recordings.
- Support automatic "padding" for recordings so you don't miss programs that start early or overrun (except the Beyonwiz).

## ABOUT THE REST

The **DGTEC** has a good digital tuner and "off" switch to save power, but also has the lowest ease-of-use score.

The **Beyonwiz** scores best for ease of use, and has an ethernet port to connect to a network, but its standby energy use is outside the MEPS guidelines so we cannot recommend it.

The **Kogan** also has a good digital tuner, but the set-up screen for future recordings is difficult to use and the small front panel is not very informative. It also doesn't label recordings with the program name.

The **TEAC** has an "off" switch but is not easy to use. It takes some time to recognise the hard drive, and we found recordings consistently started a minute or two late. The remote control's buttons are small and too close together, and the front panel is hard to read.

The **Akai** may not record if the hard drive is in "sleep" mode. You

also cannot rename or protect recordings from deletion.

The **Strong SRT5425** is relatively easy to set up, but all our recordings ended a minute before the scheduled time. You cannot protect or rename recordings, and deleting them is difficult. The remote control has small, closely spaced buttons.

The **Yess** is the only STB on test to come with an HDMI cable. Unfortunately, it has the worst-performing digital tuner. It also ended recordings about one minute before the scheduled time. It doesn't label recordings with the program name, deleting programs is difficult, and there's no protection to stop you deleting by mistake. Its remote is difficult to use, the onscreen menus have very small text that is hard to read, and the front panel doesn't display much information.



STORY MATTHEW STEEN

## Tread carefully

Wet cornering performance separates our recommended tyres from the rest.

at speeds of 80km/h. In an emergency, this can mean the difference between avoiding an accident and serious injury, so check the braking scores (see table, opposite) to see how well the tyres perform.

### Air pressure

Tyre pressure is measured in kilopascals (kPa) or pounds per square inch (psi). Keep your tyres inflated to the pressure recommended by the car manufacturer; this is usually found on the sticker inside the driver's door frame, in the glovebox or on the petrol tank flap. The manufacturer's recommendations refer to pressure when the tyres are cold, not after you've been driving for some time, so it's best to check your tyres at the petrol station down the road rather than halfway through your journey.

When driving with a heavy load such as a trailer, inflate your tyres to a higher pressure – check the sticker for advice.

Proper inflation gives you the best wear and is the safest way to drive. Both over- and under-inflating your tyres will wear them out sooner. Driving with under-inflated tyres also uses more petrol, adversely affects your car's handling and may lead to tyre damage, so check the pressure regularly, preferably weekly.

Don't forget to check the air pressure of your spare tyre, too – there's nothing worse than getting a flat tyre and finding the spare is flat as well. >

### NUTSHELL

>> On test: 15 sets of car tyres, size 195/65 R15 91V and 91H, ranging in price from \$99-\$179 per tyre.

>> Slow down in the wet, since none of the tyres on test can match their performance on a dry road under wet conditions.

**R**esearch and design are key ways of improving any technology. But when CHOICE sees new car tyre innovations such as scented tyres, yet still doesn't get excellent results for tyres in the wet, we know where we'd prefer those R&D dollars to go.

We tested 15 sets of size 195/65 R15 91V and 91H tyres, costing between \$99 and \$179 per tyre. This size is currently used on some models of a number of popular medium cars, such as the Ford Focus (our test car), Honda Civic, Kia Cerato, Mazda 3, Toyota Corolla and Volkswagen Golf.

Depending on the amount of driving you do, you can expect to buy a new set of tyres every couple of years. Be sure to regularly check the tread wear indicators, or ask your service centre to do this for you.

### Cornering and braking

CHOICE tests both braking and cornering performance in wet and dry conditions. We found more than half of the tyres on test had poor scores (40%-45%) in wet cornering, which means that in an emergency situation the car could be in danger not only of drifting into the other lane, but also going off the road entirely. We also only tested at a wet cornering speed of 75km/h – any faster and we'd consistently come off the track.

The difference between the best and worst braking distances in wet or dry conditions is about four metres

### THANK YOU

We'd like to thank **Morgan Park Raceway** in Warwick, Old, for ensuring a smooth test, and **Ford** for generously loaning us the test vehicle, a Focus LX.



Both over- and under-inflation reduce tread contact with the road. Proper inflation assures maximum contact.

## WHAT TO BUY



**82%** BFGoodrich Sport T/A

PRICE \$135



**82%** Goodyear Assurance

PRICE \$145



**78%** Kumho Solus KH15

PRICE \$165



**77%** GT Radial Champiro 228

PRICE \$165



**76%** Bridgestone Turanza AR10

PRICE \$142

| PRODUCT                          | PERFORMANCE       |                                           |    |                                    |    |                                         | SPECIFICATIONS                          |                     |         |                     |
|----------------------------------|-------------------|-------------------------------------------|----|------------------------------------|----|-----------------------------------------|-----------------------------------------|---------------------|---------|---------------------|
| Brand / model<br>(in rank order) | Overall score (%) | Dry cornering score (%; at 80 and 85km/h) |    | Wet cornering score (%; at 75km/h) |    | Dry braking score (%; at 50 and 80km/h) | Wet braking score (%; at 50 and 80km/h) | Speed rating        | Contact | Price per tyre (\$) |
| BFGoodrich Sport T/A             | 82                | 95                                        | 65 | 95                                 | 75 | V                                       |                                         | bfgoodrich.com.au   |         | 135                 |
| Goodyear Assurance               | 82                | 80                                        | 80 | 90                                 | 80 | V                                       |                                         | goodyear.com.au     |         | 145                 |
| Kumho Solus KH15 (A)             | 78                | 80                                        | 75 | 85                                 | 70 | V                                       |                                         | kumho.com.au        |         | 165                 |
| GT Radial Champiro 228           | 77                | 75                                        | 75 | 85                                 | 75 | H                                       |                                         | gtrdial.com.au      |         | 165                 |
| Bridgestone Turanza AR10         | 76                | 75                                        | 65 | 90                                 | 80 | V                                       |                                         | bridgestone.com.au  |         | 142                 |
| Maxxis MA-P1                     | 69                | 75                                        | 55 | 85                                 | 65 | V                                       |                                         | maxxis.com          |         | 125                 |
| Michelin Energy XM1+             | 69                | 70                                        | 60 | 80                                 | 70 | H                                       |                                         | micelin.com.au      |         | 179                 |
| Marshal Matrac MH11              | 68                | 80                                        | 45 | 85                                 | 65 | V                                       |                                         | kumho.com.au        |         | 125                 |
| Yokohama A.drive                 | 66                | 80                                        | 40 | 85                                 | 65 | H                                       |                                         | yokohama.com.au     |         | 149                 |
| Dunlop SP Sport300E              | 65                | 70                                        | 45 | 85                                 | 65 | V                                       |                                         | dunloptyres.com.au  |         | 145                 |
| Pirelli P7                       | 65                | 75                                        | 45 | 80                                 | 65 | V                                       |                                         | pirelli.com.au      |         | 159                 |
| Firestone Firehawk TZ100         | 63                | 70                                        | 40 | 85                                 | 65 | H                                       |                                         | bridgestone.com.au  |         | 99                  |
| Federal Formoza FD1 (A)          | 62                | 65                                        | 40 | 85                                 | 65 | H                                       |                                         | federaltyres.com.au |         | 109                 |
| Hankook Enfren H430              | 62                | 65                                        | 45 | 80                                 | 65 | H                                       |                                         | hankooktyre.com.au  |         | 115                 |
| Toyo TEQ Plus                    | 61                | 65                                        | 45 | 80                                 | 60 | H                                       |                                         | toyo.com.au         |         | 159                 |

**USING THE TABLE Scores** The overall score is made up of: Dry cornering: 30%; Wet cornering: 30%; Dry braking: 20%; Wet braking: 20%. **Speed rating** See What to Look For, page 58. **Price per tyre** Average retail as supplied by distributors, April 2010. Tyre prices can vary widely, so shop around. **TABLE NOTES (A)** Discontinued, but may still be available in some stores.



## WHAT TO LOOK FOR

### TYRE ESSENTIALS

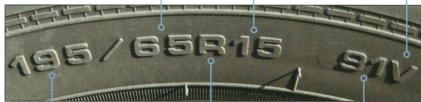
Each tyre has standard markings that allow you to pick the right size and type for your car. It's a confusing mix of letters and numbers, and of measurements in millimetres and inches. Here's what it all means, using the code for the size on test, P195/65 R15 91V and 91H:

**P** stands for passenger tyre.

**65** is a percentage describing the tyre's profile or aspect ratio. It's the ratio between the tyre's section height (distance from the wheel bead seat to the top of the tyre) and its section width – in this case, 65%.

**15** refers to the diameter (in inches) of the rim the tyre should be fitted to.

**V** is the speed rating index and tells you the maximum speed at which the tyre can travel (in this case, 240km/h). Other examples: S (180km/h), T (190km/h), H (210km/h), and W (270km/h).



**195** is the section width (in mm) when the tyre is fitted to the recommended rim, inflated to the recommended pressure and not under load. The section width is the distance between the tyre's exterior sidewalls.

**R** stands for radial, which is the most common construction method for passenger car tyres.

**91** is the load rating index, which tells you the maximum weight one tyre can carry (in this case, 615kg). Other examples: 84 (500kg), 86 (530kg), 89 (580kg), 92 (630kg) and 94 (670kg).

### TREAD WEAR RATING

Tyre models that are marketed in the US must have a **tread wear rating** as part of the Uniform Tyre Quality Grading system (UTQG) operated by the US government's National Highway Traffic Safety Administration. If the same tyre is available here you can use the information too – it's printed on the tyre sidewall.

Under the system, a tyre's tread wear is measured under controlled conditions involving an 11,500km drive on a specified test course, and compared with a "standard" tyre with a rating of 100. A manufacturer-assigned rating of 200 indicates a view that the tyre should last twice as long as the standard model. So the higher the number, the longer you should expect a tyre to last. Manufacturers have different views, so tread wear ratings are not comparable between brands.

We test for braking and cornering, but not durability. Real-life wear of a tyre depends on a number of aspects, such as the road surface, tyre pressure, wheel alignment and driving style. If there is a tread wear warranty, that's a more reliable indicator of the life of the tyre.

Tyre durability is difficult and expensive to test properly. While it is done in Europe by several consumer organisations, the tyres are different to Australian models and a comparable test is not viable for us to carry out.

### ABOUT THE REST

We test the tyres in fairly extreme situations that you'd normally only encounter in an emergency. In everyday driving conditions, all the models on test are likely to be OK, and the differences indicated by our scores may not be noticeable.

However, emergency performance is what really counts. The tyres in our What to Buy list (page 57) have better wet-cornering scores than the others, and also rate from good to excellent in most of the other performance scores.

As you can see from the range of prices, paying more doesn't necessarily guarantee a better tyre.

### HOW WE TEST

**Cornering** Our cornering tests are carried out with the traction control disabled. However, CHOICE does not recommend disabling traction control, as it aids the car's handling and safety in both wet and dry conditions. Our testers, Peter Horvath and Matthew Steen, assess how well the tyres keep the car in the set lane at speeds of 85km/h and 80km/h in dry conditions and 75km/h in wet conditions, using a right-hand corner with about a 55m radius.

The tests are carried out without the driver knowing which brand of tyre has been fitted and in random order. The testers repeat the cornering on a different day and in a different random order. They also use

a control (two sets of the same model) as an additional check for variations in the test that aren't due to model differences.

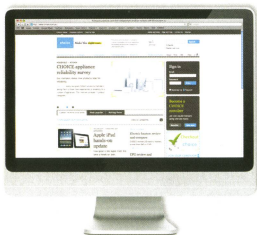
**Braking** Using a GPS system, our testers measure the distance it takes to come to a complete standstill in emergency braking tests, from driving speeds of 50km/h and 80km/h in both dry and wet conditions.

**Rolling noise** Our testers also carry out rolling noise measurements at the driver's left ear at 50km/h and 80km/h on a public road. At each speed there is only up to 3dB difference between the models – so small you probably wouldn't notice it. However, the tyres on test are new, and bigger differences may develop with increased wear.

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## NUTSHELL

>> If you're in the market for a timber floor, buy recycled or FSC-certified timber (for all components of the product).

>> If you're building from scratch and can choose any type of floor, go for the one that uses the least materials.

>> Consider thermal mass in your design by choosing solid flooring if you live in a cool temperate or desert climate.



STORY SUZIE BROWN

## Walk on wood

The increasing popularity of timber floors poses real concerns about harvesting timber in Australia and illegal logging overseas. CHOICE investigates your sustainable options.

**A**bout 10% of our total yearly timber imports (\$840 million worth) is estimated to be illegally logged timber products – mostly outdoor furniture, timber boards and decking, and pulp and paper. This timber may have come from clear-felled rainforests in neighbouring countries such as Indonesia (one of Australia's biggest trading partners), Malaysia or Papua New Guinea. Tropical rainforests are huge carbon stores, and their destruction contributes about 20% of global greenhouse gas emissions each year.

"More than half the logging in Indonesia is illegal," says Greenpeace Forests Campaigner, Reece Turner. "Indonesia is the world's third-highest emitter of greenhouse gases (after China and the US) because of deforestation." Illegal logging also causes the loss of plant and animal species, with the Sumatran tiger and the orang-utan both on the brink of extinction.

In May 2009, Greenpeace issued a joint statement with WWF, Oxfam, The Wilderness Society and the Australian Conservation Foundation (ACF), as well as timber merchants and large timber retailers including IKEA, Bunnings and Simmonds Lumber, calling on the federal government to ban illegal timber imports. The Rudd government had pledged to "seek to ban" illegal timber imports during the last federal election, but is yet to follow through on this promise.

Some industry players have already acted. Bunnings now only sells outdoor furniture that is produced from timber sourced from sustainable forests certified by the Forest Stewardship Council (FSC), while Simmonds Lumber uses a simple DNA system to check all their timber imports are from legal sources. Meanwhile, Greenpeace has published the Good Wood Guide to help Australians find legally and sustainably sourced timber products.

### Good timbers include:

- Rubberwood from old rubber trees
- FSC-certified or Ecotimber New Guinea teak
- FSC-plantation eucalypt, bamboo, and FSC or Ecotimber taun (a type of large hardwood).

### Timbers to avoid include:

- Burmese teak
- African mahogany
- Merbau
- Ramin
- Meranti

### Buy recycled timber

According to all the experts contacted by CHOICE, your best option is to buy recycled boards. Some new plantation hardwood timbers take up to 100 years to grow, so recycled boards are a more sustainable choice and are growing in popularity. Using recycled timber can also be an >

## ENVIRONMENTAL IMPACT OF FLOORING SYSTEMS

**A**voiding timber from destructive logging is important, but there are also other major considerations.

• **Embodied energy used to make the floor** Choose the product that has the least materials. If you have timber or other hard flooring, avoid covering it with carpet, which involves significant additional materials and energy to produce. Limit carpet to a few rooms, or use smaller rugs or mats.

• **Regular floor cleaning** "One of the biggest environmental impacts of floors is the energy spent on cleaning [them]," says David Baggs from Ecospecifier. "Carpet is the worst performer compared with tiles, rubber, vinyl and other hard floors, because people vacuum every week as well as use steam cleaners." Caitlin McGee, from the Institute of Sustainable Futures at the University of Technology, Sydney, agrees: "Low-maintenance surfaces are better from a life cycle perspective." McGee recommends bamboo, polished stone or concrete, or "resilient finishes" such as natural linoleum or cork. See Sustainability Assessment of Different Floors, page 63, for more.

• **Durability of the flooring** The longer-lasting a material is, the fewer resources that are required over time. Carpets have a short lifespan – popular low-cost carpets only last five to 10 years because of wear and discolouration, as well as changing interior design tastes. Hard floors such as timber, stone, concrete or tiles last considerably longer.

• **Floor finishes add to your environmental footprint** Even if a floor is certified eco-timber, it may be finished with a high-embodied energy, potentially toxic polyurethane coating. Instead, choose a natural oil, hard-finish coating; it will need ongoing maintenance, but will last longer as it can be more easily repaired than a hard polyurethane finish that requires heavy sanding.

• **Toxicity of emissions from floor materials** Some floor coverings are known to emit volatile organic compounds (VOCs) – chemicals that are linked with health problems including damage to the nervous system, allergic reactions and cancer. Adequate ventilation can help, but may not be enough to ensure healthy air quality, so it's wise to avoid these completely.

• **The rise of bamboo** According to Greenpeace and Ecospecifier, harvesting fast-growing bamboo has fewer environmental and greenhouse impacts than harvesting timber. Although it makes a tough, durable flooring material, bamboo is often manufactured using a glue that can emit VOCs. Most bamboo floorboards available in Australia use low-emission glues (rated E0 or E1 under the Australian Standard for formaldehyde emissions), but do your research as the information is often not very visible.

• **Thermal mass** A high thermal mass material absorbs heat from the sun (via windows) or from indoor heating to warm the inside of a building in winter, while in hot weather shaded thermal mass can help cool the interior by absorbing heat. Thermal mass effectively

keeps the indoor temperature stable, massively reducing the energy requirement and costs of heating and cooling, although good insulation is also needed. Thermal mass is less important in subtropical and tropical climates, where ventilation is more vital to keeping cool.

Floors that have a high thermal mass include stone, tile, concrete, rammed earth and bricks. Covering these hard floors with carpet, linoleum or floorboards will greatly reduce the benefits of thermal mass. On the other hand, carpet does provide some insulation benefits for the floor, which can reduce heating costs in winter, as well as feel more comfortable.

A concrete slab is one of the most common flooring systems and can offer benefits of thermal mass. However, concrete also has a very high embodied energy. If you need to use concrete, McGee suggests choosing a "green concrete" (concrete that contains extenders such as fly ash), which has a lower embodied energy than traditional concrete.

• **Using carpet sustainably** Buy a second-hand carpet and have it fitted to your space; Melbourne Carpet Recyclers sells and installs whole second-hand carpets. Some carpet products are made from recycled materials such as PET and other plastics; otherwise, look for sustainable natural fibres such as cork, sisal or seagrass. There are also smart systems that minimise wastage, such as Interface carpet tiles, which can be replaced in areas of wear and tear and are also completely recycled at the end of their life.

## NUMBER CRUNCH

### 10-15 YEARS

The estimated period of operational energy of your house thought to be embodied in the creation of your floor.

### 10%

The estimated amount of timber imported into Australia that comes from illegal forests.

Some new  
plantation  
hardwood  
timbers  
take up to  
100 years  
to grow,  
so your  
best option  
is to buy  
recycled  
boards

## DID YOU KNOW?

### Ecospecifier "Green Tag"

**T**here are no simple answers to choosing a more sustainable floor. The table opposite outlines a range of flooring options and the advantages and disadvantages of each.

To help simplify these complex decisions, Ecospecifier has launched "Green Tag", a new eco-label for green building materials and products. The label will appear on all types of sustainable building products found in hardware stores or building supply centres, and will rate them according to their total life cycle. The rating will include health and toxicity issues of products, embodied carbon, biodiversity impacts, efficiency of building and installation, and corporate social responsibility. The Green Tag label will appear on shelves towards the end of 2010.

In the meantime, the Ecospecifier website contains a vast range of environmentally friendly building products to help you decide which option is best for your home. The Good Environmental Choice Australia site also lists a number of environmentally friendly flooring products, while the FSC and Greenpeace Good Wood Guide sites list sustainable timber products (see Contacts, above right).

< opportunity to floor with rare hardwoods that are difficult to buy now; however, they are in short supply and may cost more than plantation-grown timber.

Recycled timber can be sourced from companies that specialise in reclaimed floorboards. Also, look for boards being sold from demolished buildings, either through internet trading sites or direct from a demolition company or builder. Buying online can be risky, however, as there's no guarantee the floorboards are actually recycled, so always ask for proof.

### Look for FSC-certified

The next best option is certified sustainable timber. Major environmental groups recommend the global eco-label FSC; in fact, the board of FSC Australia has representatives from the ACF, The Wilderness Society, Friends of the Earth and Fauna & Flora International. Whether from a plantation or a native forest, FSC-certified means the timber is from a well-managed forest that is being protected to hand over to future generations in as good or better condition than it is now. Animal and plant species are protected, and water sources and soil quality are conserved.

You can find a range of timber from Australia and overseas with the FSC logo – for example, from stores

## CONTACTS

- **Australian Conservation Foundation:** [www.acfonline.org.au](http://www.acfonline.org.au)
- **Australian Forestry Standard:** [www.forestrystandard.org.au](http://www.forestrystandard.org.au)
- **Ecospecifier:** [www.ecospecifier.org](http://www.ecospecifier.org)
- **Forest Stewardship Council:** [www.fsc.org.au](http://www.fsc.org.au)
- **Greenpeace Good Wood Guide:** [www.goodwoodguide.org.au](http://www.goodwoodguide.org.au)
- **Good Environmental Choice Australia:** [www.geca.org.au/productsregister.htm](http://www.geca.org.au/productsregister.htm)
- **Your Home guide:** [www.yourhome.gov.au](http://www.yourhome.gov.au)

such as Bunnings, which stocks FSC-certified timber and outdoor furniture – as well as other FSC-certified wood and paper products, such as office paper. In the US, there is even an FSC-certified Gibson guitar on the market.

### What about AFS-certified?

Like the FSC, timber from Australian Forestry Standard (AFS)-certified forests protects environmental values into the future. The AFS is recognised by the Programme for the Endorsement of Forest Certification Scheme (PEFC), a global eco-label based in Europe, and is also an Australian registered standard. However, while the AFS has federal and state government endorsement and widespread timber industry support, environment groups are not supportive because its board only has government and industry representatives, with no environmental or community-based representation.

Lindsay Hesketh, ACF's Forests Campaigner and FSC board member, is one critic. "The AFS has developed some generic standards, but doesn't require on-ground certification," he says. "It's just desktop certification that systems are in place to do certain things. We can see no evidence that someone actually goes to check that what is said to be happening is, in fact, happening." Hesketh believes the PEFC label also lacks on-ground auditing and meaningful stakeholder engagement, in contrast with the FSC system where on-site forest audits happen every 12 months and stakeholders who also use the forest are consulted.

David Baggs, technical director at the green building products knowledge base Ecospecifier (see Finding the Right Floor, above left), also recommends consumers use FSC-certified timber as a first choice, and then AFS- or PEFC-certified timber as a second option. "FSC is an independent, third-party assessed scheme, whereas AFS or PEFC are timber industry-based schemes," he says. "FSC also has the highest ecological





## SUSTAINABILITY ASSESSMENT OF DIFFERENT FLOORS

| FLOOR TYPE                                           | ADVANTAGES                                                                                                                                                                                                                                                                                                                                                   | DISADVANTAGES                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Carpet</b>                                        | <ul style="list-style-type: none"> <li>• Provides warmth (by insulating the floor) and acoustic benefits</li> <li>• Carpet can sometimes be recycled; some brands of carpet contain recycled materials such as PET plastic</li> <li>• Natural-fibre carpets such as coir, sisal and seagrass are non-toxic and can be from a sustainable resource</li> </ul> | <ul style="list-style-type: none"> <li>• Low thermal mass benefits</li> <li>• Is one of the least durable floor systems</li> <li>• High energy requirement for cleaning</li> <li>• Some synthetic carpets and dyes can be toxic</li> <li>• Can be high waste in installation</li> <li>• Is sometimes difficult to recycle</li> </ul> |
| <b>Timber</b>                                        | <ul style="list-style-type: none"> <li>• Can be recycled – and it's often possible to buy recycled timber</li> <li>• Relatively hard-wearing and durable</li> <li>• Easy to clean</li> <li>• Low embodied energy</li> </ul>                                                                                                                                  | <ul style="list-style-type: none"> <li>• May be sourced from unsustainable forestry, unless it carries proper certification labels</li> <li>• Low thermal mass benefits</li> <li>• Some finishes or composite products can be petroleum-based and toxic</li> </ul>                                                                   |
| <b>Bamboo</b>                                        | <ul style="list-style-type: none"> <li>• Comes from a fast-growing, more sustainable resource than timber or plastic flooring</li> <li>• Hard-wearing and durable</li> <li>• Easy to clean</li> <li>• Low embodied energy</li> </ul>                                                                                                                         | <ul style="list-style-type: none"> <li>• Some bamboo floorboards may have been finished with toxic glues</li> </ul>                                                                                                                                                                                                                  |
| <b>Linoleum, rubber or cork</b> ("resilient floors") | <ul style="list-style-type: none"> <li>• Made from renewable materials such as linseed oil, rubber, cork and wood fibre</li> <li>• Low toxicity</li> <li>• Fairly durable</li> <li>• Easy to clean</li> <li>• Low embodied energy</li> </ul>                                                                                                                 | <ul style="list-style-type: none"> <li>• Not recyclable</li> <li>• All these products are imported to Australia</li> <li>• Some rubber, cork and wood fibre floors contain petroleum-based materials</li> </ul>                                                                                                                      |
| <b>Ceramic tiles</b>                                 | <ul style="list-style-type: none"> <li>• Good thermal mass</li> <li>• Low toxicity</li> <li>• Easy to clean</li> <li>• Highly durable</li> </ul>                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>• Higher embodied energy</li> <li>• Local environmental impacts of quarries</li> </ul>                                                                                                                                                                                                        |
| <b>Polished stone</b> (granite, sandstone etc)       | <ul style="list-style-type: none"> <li>• Good thermal mass</li> <li>• Low toxicity</li> <li>• Easy to clean</li> <li>• Highly durable</li> </ul>                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>• Higher embodied energy (especially if imported from overseas)</li> <li>• Local environmental impacts of stone quarries</li> </ul>                                                                                                                                                           |
| <b>Polished concrete</b>                             | <ul style="list-style-type: none"> <li>• Good thermal mass</li> <li>• Easy to clean</li> <li>• Highly durable</li> </ul>                                                                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>• High embodied energy of concrete, as well as the polishing process</li> <li>• May be finished with a toxic polyurethane sealant</li> </ul>                                                                                                                                                  |
| <b>Vinyl</b>                                         | <ul style="list-style-type: none"> <li>• Low maintenance, easy to clean</li> </ul>                                                                                                                                                                                                                                                                           | <ul style="list-style-type: none"> <li>• Can contain toxic plasticisers and lead-based stabilisers</li> <li>• Made from petroleum-based materials</li> </ul>                                                                                                                                                                         |

Your best approach is to buy a timber floor with eco-labels clearly marked, and ask the supplier to show proof that it's certified

outcomes – but it's important to note that FSC, AFS and PEFC are clear certification of legal source, and this provides an important distinction where illegally sourced rainforest species are so common."

There are small-scale, sustainably managed plantations or forests in Australia and overseas on their way to becoming FSC-certified; Greenpeace lists them in the *Good Wood Guide* as "Ecotimber". They include communities and timber suppliers in the Solomon Islands and Papua New Guinea with whom Greenpeace has worked to help start the rigorous process of becoming FSC-certified.

### Beware false green claims

Look out for products with multiple wood layers or components, only some of which are certified with the FSC or another eco-label. Engineered timber floorboards, for example, can have a timber veneer and plywood underneath, but not all components are from certified sources. According to Baggs, you should

read the certification details carefully and ask the supplier to confirm the total product is fully certified. "Merchants should know about their product," he says.

Watch out, too, for false eco-labels or other green claims. Some retailers develop their own eco-labels – for example, "certified plantation rainforest timber" – which have absolutely no substance or proof of any environmental benefits.

Genuine eco-labels such as FSC or AFS face the challenge that not enough consumers are aware of them. A recent Newspan survey commissioned by Greenpeace found only six per cent of people had any idea how to tell which timber is from illegal sources overseas and which is legal.

Your best approach is to ask the supplier to show proof of certification, and to purchase products clearly marked with the appropriate eco-label logos. If you're employing a builder to buy on your behalf, make sure they consult the lists of certified timber suppliers on the websites of FSC, AFS, Greenpeace and Ecospecifier. ■



STORY KATE BROWNE

# Everybody needs good neighbours

Disputes with neighbours are unpleasant, but can usually be resolved without going to court.

## NUTSHELL

>> Neighbourhood disputes are on the rise; the three most common complaints relate to fencing, trees and noise.

>> CHOICE outlines your neighbourhood rights, and what you can do if things go wrong.

Sometimes it can be hard to love thy neighbour. From late-night parties to overhanging trees, there are some things that send even the most relaxed residents into a rage. And with more and more Australians living in densely urbanised areas, there have never been more complaints between neighbours.

But before you let tensions boil over the fence, make sure you know what your rights are, and where to go if you need advice. CHOICE looks at the three top neighbourhood flashpoints.

## Flashpoint #1: Dividing fences

Disputes over fences are the number one neighbourhood issue that state community justice centres deal with. Last financial year, the Dispute Settlement Centre of Victoria alone received more than 7000 phone calls from residents wanting advice about fencing disputes.

State laws dictate your rights when a dividing fence needs to be replaced or repaired. Under the NSW *Dividing Fences Act*, for example, neighbours must share the cost of the fencing – although the split is not necessarily 50/50. You could negotiate to pay less if your neighbour wants a more expensive type of fence.



## CONTACTS

- NSW Community Justice Centre: [www.cjc.nsw.gov.au](http://www.cjc.nsw.gov.au)
- Victorian Department of Justice: [www.justice.vic.gov.au](http://www.justice.vic.gov.au)
- Queensland Department of Justice and Attorney General: [www.justice.qld.gov.au](http://www.justice.qld.gov.au)
- SA Department of Justice: [www.justice.sa.gov.au](http://www.justice.sa.gov.au)
- WA Department of the Attorney General: [www.dotag.wa.gov.au](http://www.dotag.wa.gov.au)
- NT Department of Justice: [www.nt.gov.au/justice](http://www.nt.gov.au/justice)
- Tasmanian Department of Justice: [www.justice.tas.gov.au](http://www.justice.tas.gov.au)
- ACT Conflict Resolution Service: [www.crs.org.au](http://www.crs.org.au)

If you're planning on building or replacing a fence, you must consult your neighbour first. Ensure you get a couple of quotes beforehand and record everything that's been agreed to with your neighbour, including details such as the type of fence to be constructed, who will do the work, total costs and how the costs will be shared.

## Flashpoint #2: Trees and hedges

While trees are attractive and provide welcome shade, they are also the cause of some of the biggest disagreements between neighbours. Tales abound of illegal lopping and even poisoning of trees in some neighbourhoods, not to mention the practice of growing "spite hedges" – dense shrubbery grown deliberately to block a neighbour's view or sunlight.

If your neighbour's tree has branches overhanging your property, you can legally trim them back to the boundary of their land. (Before cutting any branches, however, you'll need to check with your local council to see if the tree is protected by a preservation order.)

If the lopping involves extensive work, it's a good idea to consult a professional. The National Arborists Association of Australia has a list of qualified and insured contractors available on their website (see [www.naaa.net.au](http://www.naaa.net.au)). Again, it's a good idea to speak with your neighbour first. In some instances they may even offer to share the costs of lopping with you, even though they aren't legally required to do so.

Conversely, your neighbours can sue you if your tree's roots cause damage to their property. You may also be liable if your tree falls over and damages property or a person, so be sure to keep your trees in good condition and report any problems to your local council for advice.

If a neighbour's tree is blocking your home or garden's access to sunlight, perhaps even stopping sunlight reaching the solar panels on your roof, you may be able to arrange to have the trees thinned professionally so that filtered light can get through. This may also work

well for trees that are blocking your view. Again, talk to your neighbour first – and be sure to contact your local council for specific advice before you do anything.

From August, in NSW the Land and Environment Court will have the power to intervene in cases where negotiations have broken down between neighbours over the issue of trees or hedges that “severely” block sunlight or views. If the tree or hedge owner refuses to comply with the court order, the council may lop the tree or hedge and charge the costs to the owner. In certain circumstances, criminal proceedings may be brought against the owner.

### Flashpoint #3: Unreasonable noise

Barking dogs, blaring music and all-night parties are just some of the joys of urban living, so it's not surprising noise is another leading cause of neighbourhood disputes. Fortunately, there are laws in place to deal with it.

Noise restriction laws are set by each state and territory. For specific information for your area, check with the relevant authorities – usually via your state or territory environment office. These laws are quite explicit, so it should be easy to work out if your neighbour is in breach.

In Victoria, for example, it's illegal under the *Environment Protection Act* to cause “unreasonable noise” from any residential premises. Residential noise may be unreasonable at any time of the day, although your neighbour playing loud music after 10pm on a weeknight is more likely to be considered “unreasonable noise” than doing the same thing at 10am. However, noise can be considered unreasonable at any time if it's excessively loud or continues for a long time.

If a barking dog is causing the noise, your local council has statutory powers to deal with this problem. Councils can investigate the matter on your behalf and may be able to issue a nuisance order, depending on the animal laws in your state.

As with fences and trees, always try approaching your neighbour directly to see if you can find a solution. They may not even be aware they're disturbing you, and discussing it diplomatically may nip the problem in the bud before it escalates. However, if the situation is unbearable and needs to be resolved immediately, such as a loud car alarm or a noisy late-night party, contact the police, who have the authority to issue noise abatement directions and dispatch fines on the spot. ■

## NUMBER CRUNCH

### 7399

The number of phone calls received by the Dispute Settlement Centre of Victoria (DSCV) in 2008/09 from neighbours seeking advice about fence disputes;

### 3046

The number of phone calls received from neighbours seeking advice about behaviour, including noise issues;

### 2363

The number of phone calls received from neighbours seeking advice about trees, shrubs and creepers.

## DID YOU KNOW?

### Flashpoint resolution 101

If you have a dispute with a neighbour, don't despair. The knack is in knowing what to do and where to go to get help.

#### Stage 1: Diplomacy

Before confronting the cause of your angst, wait a while to see if the issue resolves itself. If it doesn't, calmly approach your neighbour about the problem. Although it may feel awkward, it's preferable to request a face-to-face meeting, perhaps on neutral territory.

The best tactic is to assume your neighbour isn't aware of the problem and will be more than happy to fix it for you. Should the friendly approach fail, however, or you feel uncomfortable confronting your neighbour in person, contact them in writing. Be sure you are clear about what the problem is, and do your homework beforehand. Mention any

laws you believe they are in breach of; contact your local council or the Department of Justice in your state (see Contacts, opposite) for details.

Keep all copies of any related correspondence in case the issue escalates.

#### Stage 2: Mediation

A mediator is a neutral third party who can organise negotiations and suggest a fair solution, before the issue reaches the point where it would need to go to court. A good mediator will help open up the lines of communication rather than make a decision as to who's right or wrong. The NSW Community Justice Centre says more than 80% of issues it handles are successfully resolved by mediation.

There are conflict resolution services in most Australian states and territories that can assist with advice

and mediation, which is generally free or at a low cost.

Mediation is a good alternative to going to court. Not only is it faster and costs a lot less, it also gives the people involved the chance to decide what they agree on – which is not always an option in the courtroom. A mediator will also assist in preparing an agreement and solution in writing for all parties.

Mediation generally has a very high success rate, but bear in mind mediators can't provide legal advice.

#### Stage 3: Litigation

Going to court can be expensive and time-consuming, and the outcome can be unpredictable for all concerned. Many courts require that neighbours try mediation first to come up with a solution, so this is definitely an option worth exploring before negotiating the legal system.



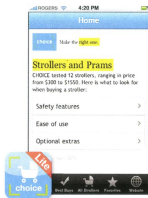
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**Executive assistant** Georgina Saltos.

**CHIEF OF STAFF** Natalie O'Toole.

**COMMERCIAL DIRECTOR** George Perry.

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**DIGITAL HOME** Chris Ruggles (Team Leader), Denis Gallagher, Scott O'Keefe.

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Bonacruz, Rebecca Gatto, Peter Horvath, Fiona Mair. **WHITEGOODS** Matthew

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**SUBSCRIPTIONS** Nootaya Hwang (Supervisor), Thelma Bracken, Lynda-Maree

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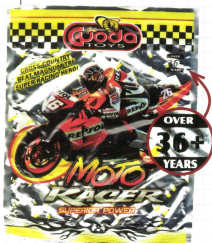
A full index, with links to articles, from 2002 onwards can be found at [www.choiceextra.com.au](http://www.choiceextra.com.au) (see instructions, below right). **Bold** type indicates a product test, member survey or user trial report. Unbolded type indicates a CHOICE research report. \* Indicates an update, addition or correction.

|                             |              |  |                              |              |                            |          |                             |               |
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The winner of this month's best entry is L. Salmon, who's already brandishing his umbrella. Thanks also to K. McFarlane, K. Ilandi, D. Horsfall, B. Peck, B. Rix and S. Clark for their contributions to this month's Hard Word. If you have any examples you think deserve to be on this page, send them to The Hard Word, CHOICE, 57 Carrington Road, Marrickville 2204. Please don't email us your entries – we need the unmarked originals. You can also log on to [www.choice.com.au/video](http://www.choice.com.au/video) to see the latest Hard Word on video.

## TOYS FOR THE BIG BOYS...



### CONTAINS THE BLEEDIN' OBVIOUS

There seems to be some confusion as to whether these chips contain potatoes...

... and one would hope a packet of raw peanuts actually contains peanuts ...

... so should we be surprised that this tin of tuna contains fish?

### COOKING INSTRUCTIONS:

FOR BEST RESULTS COOK FROM FRY PRODUCT MUST BE COOKED BEFORE

Deep fry in oil at 190°C (375°F) until golden and crispy.

INGREDIENTS MAY CONTAIN, POTATO, BEEF TALLOW, DEXTROSE

## LAWNTON COUNTRY MARKETS

PH: 3205 2542  
RAW PEANUTS  
PRODUCT OF AUSTRALIA  
500g NET

**RAW PEANUTS**  
NET CONTAIN TRACES OF PEANUTS  
\$2.95



### FEELING A LITTLE TOO CHIPPER?

Need taking down a notch or two? This pack of six "insulting" tapes should do the trick!



### WHAT'S THE DISCOUNT ON DEAD FISH?

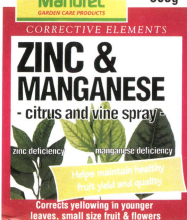


### IF ONLY NATURE WERE SO PREDICTABLE...

Need rain? Just put this stuff on your fruit crop and Sod's Law says you'll have rain in less than three days.

ALLERGY ADVICE: CONTAINS FISH

**POISON** S6 NOT TO BE TAKEN  
KEEP OUT OF REACH OF CHILDREN  
500g



Apply at least 3 days before rain.